Welcome to the world of Exergaming.

This newsletter celebrates the opening of the University of South Florida’s XRKade Research Lab – Powered by iTech Fitness.

USF Opens Interactive Fitness Research Lab

The University of South Florida’s School of Physical Education, Wellness, and Sport Studies in cooperation with iTech Fitness of Denver, Colorado have partnered to create the first university interactive fitness research lab for children. The purpose of the XRKade fitness lab is to investigate the growing movement related to assisting children in becoming physically active and increase fitness levels through use of technology-based interactive game activities. This movement is being called Interactive Fitness or Exergaming and is increasingly being used by public school systems, YMCA’s, recreational centers and private fitness clubs to help children of all ages increase physical activity levels and maintain a healthy weight. Exergaming is the use of technology-based interactive activities (including video games) in order to increase physical activity levels in children. Some of the technology driven activities included in the lab are Dance, Dance, Revolution; Cateye game bikes; X-board, 3-Kick, and Cybex Trazer.
Why create an Interactive Fitness Lab?

One of the top reasons often given for the increase in obesity levels in children is the sedentary behavior associated with over use of technology such as watching hours of TV, or playing computer or video games. These are fun activities for kids and have become part of our American culture. Video games are not going away. The Exergaming movement suggests that children can become more physically active and reduce obesity levels and still play videogames. Games require that children must be physically active in order for the game to work. For example, the faster a child pedals the game bike the faster the car will go on the video screen. Or, the more a child jumps while wearing the Cybex Trazer belt the more points he/she can score in the video game. The physical activity possibilities are endless.

Although Exergaming has increased in popularity, (most all kids, for example have participated in Dance, Dance, Revolution) little research is available to suggest that interactive fitness is having a positive effect on fitness and activity levels. This movement is so new the research simply has not yet been done. The XRKade Research lab seeks to learn more about how interactive fitness can assist in combating childhood obesity and improve the physical activity levels of American youth. What are the implications of increased use of Exergaming equipment among children? Does Exergaming really increase children’s fitness levels? Are there social and academic benefits of interactive gaming activities? Are there benefits to special needs students? During the coming months and years the XRKade lab will investigate these questions and many more.

Open House

The interactive fitness lab is located in the Physical Education Building at The University of South Florida. “The XRKade research lab is a great opportunity for our Department and the College of Education and we are excited to investigate and learn more about the effects these technology driven activities will have on our children’s fitness,” says Steve Sanders, Director of USF School of Physical Education, Wellness, and Sports Studies.

The XRKade lab was created through donations from iTECH Fitness and their corporate partners. iTECH Fitness is the industry leader in creating interactive fitness exercise environments geared toward making fitness fun for children by utilizing interactive fitness products and services. “We are extremely excited to be working with USF on this project and we believe that the research will only help solidify the positive effects we have seen throughout the country in Exergaming fitness clubs,” says Michael G. Hansen, COO and Co-Founder of iTECH Fitness.

The lab will officially open on January 8, 2007. The School of Physical Education, Wellness and Sport Studies at USF and iTECH Fitness will be hosting an open house on January 26th for media and other lab partners. For more information on the open house please contact Steve Sanders at 813-974-4871, sanders@coedu.usf.edu
Interactive Fitness Activities

Equipment included in the XRKade Research Lab are listed here. As new technologies develop other equipment will be added to the research lab and tested with children.

X-Board is a professional grade boarding simulator that allows you to experience the thrill of snowboarding down a mountain or pulling the best skateboarding tricks. Xboard improves balance and coordination, muscular strength and endurance in leg muscles, as well as ankle flexibility and stability.

Cateye GameBike is a Revolutionary Plug and Play video game controller. The GameBike transforms gaming into a truly interactive experience. Imagine controlling every movement on the screen with your own body movement. Control steering, speed, turns, strategy and more! Play against the computer, or connect additional GameBikes and compete against friends. The GameBike improves muscular strength and endurance in leg muscles and also improves cardiovascular endurance.

iJoy® No matter the season, no matter the board sport, the motorized iJoy® Board balance trainer keeps your legs fresh, toned and ready to carve the slopes, grind a rail or catch a wave. Just hop on and press a button on the infrared wireless remote control and experience the simulated motion of a snowboard, skateboard or surfboard in action.

3-Kick is an exciting and fun work out piece! 3 Kick is very sturdy, with resilient foam pads that can be struck with shoes, bare feet, open or closed hands. The user strikes the foam pads as lights and tones are randomly activated within them. Points are awarded based on speed! Great as a training tool for kick boxers, competitions, or just a fun activity for children or adults alike.

CYBEX Trazer® is a powerful new experience that dramatically improves muscle and mental agility while adding exciting new dimensions of fun and function to exercise. CYBEX Trazer launches you into an interactive virtual world where reaction time, acceleration, speed, power and balance drive on-screen activities. It’s a unique and entertaining fitness experience.
**HOGGAN Sprint Airbounder™** provides a fun, safe and efficient whole-body exercise for adults of all ages, teenagers, and children. This revolutionary technology combines the exercise principles of rebounding, jumping, and plyometric training with the laws of physics and gravity to create optimal benefits for the user in a minimal amount of time. Its easy-to-use design, large jumping platform, and accessible handlebars for balance and adjustable resistance enable everyone to benefit from the advantages of rebounding.

**Dance Dance Revolution, (DDR)**
A player must move his or her feet to a set pattern, stepping in time to the general rhythm or beat of a song. Users stomp, slide, spin, and dance on the platforms to various dance programs while burning calories and improving cardiovascular endurance.

**Core Trainer**  Panasonic's new Core Trainer maximizes the strength of the core body's abdominal, oblique and low back muscles while minimizing joint stress, impact and aerobic demand. This easy-to-use exercise device allows users of all ages and strength levels to perform low impact exercises that can lead to high impact results. Much like horseback riding, the movement of the Panasonic Core Trainer requires users to work various muscle groups to maintain balance. Employing innovative Counter Balance exercise technology, the new device not only builds core and thigh strength, but helps prevent knee and lower back pain as it burns calories and increases basal metabolism.

**Virtual Reality Station**  this station is equipped with various interactive activities that allow the user to participate in real life games via a television. Kickboxing, Ping Pong, and Tennis are a few of the activities that get children moving their bodies and burning calories. These virtual games develop hand-eye coordination and improve agility, balance, and coordination. These interactive activities can also provide benefits with cardiovascular and muscular endurance.