



North Carolina Department of Health and Human Services
Division of Mental Health, Developmental Disabilities and Substance Abuse Services

Caswell Center

2415 West Vernon Avenue • Kinston, N.C. 28504-3321 • Courier 01-21-04

Michael F. Easley, Governor
Carmen Hooker Odom, Secretary

Beverly Vinson, Center Director
(252) 208-4222

FOR IMMEDIATE RELEASE

April 5, 2007

For more information contact:

Sherri Scharf, (252) 208-3778

Little Victories Add Meaning to Life for Caswell Center Individuals
A Salute to Occupational Therapists

What choices do you make to enhance your lifestyle? What gives meaning to your day-to-day activities? If you are like most of us, you're probably too busy to stop and ponder the meaning of life. The healthcare professionals at Caswell Center search for answers to these questions, hoping it will help determine the quality of life for the individuals they serve.

According to the American Occupational Therapy Association, occupational therapy "assists people in developing the 'skills for the job of living' necessary for independent and satisfying lives." Occupational therapy benefits people who have experienced: work-related injuries; limitations following a stroke or heart attack; mental health or behavioral problems; spinal cord injuries or amputations; sports injuries or accidents, or – in the case of Caswell individuals – birth injuries or developmental disabilities.

A Team of Experts

Caswell Center utilizes an interdisciplinary team approach to create a customized habilitation, treatment, and training plan for each individual. Because the typical Caswell individual has multiple mental and physical disabilities, this team will likely be staffed by: an occupational therapist, a speech pathologist, a dietitian, a physical therapist, a psychologist, a recreation therapist, a teacher, a nurse, and a doctor. The occupational therapy department's goal is to help each individual regain and/or maintain the life skills necessary to participate in his or her daily activities.

Diane Fleetwood, Caswell Center's Occupational Therapy Director, supervises 13 OT professionals that specialize in niches such as adaptive equipment, adaptive aquatics, psychophysiological/biofeedback research, the Snoezelen method, assistive technology, and mentoring interns, students, and volunteers. She and five other senior occupational therapy staff each manage about 70 cases. Developing sub-specialties, Fleetwood says, is a progressive approach that allows her team to keep up with advances in the field and better relate to interns who are placed at Caswell Center. "We challenge ourselves to be creative in facilitating our clients' skills and figure out what makes them happy," she adds. Fleetwood is pleased about having "positive student outcomes," explaining that Caswell Center has hired many former interns, several of them from East Carolina University.

Adaptive Dinner: How to Eat

Can you imagine trying to eat peas when you could not hold a fork or spoon? Fleetwood's occupational therapists work closely with the adaptive equipment staff to develop specialized dining utensils based on the individual's evaluation outcome. For individuals who find it difficult to hold a utensil --due to arthritis, muscle weakness, or limited range of motion in the joints of their hands – it makes all the difference. As shown below, the occupational therapist has an array of adapted spoons to try with each individual to facilitate better grasping skills so that the individual can participate in self-feeding.



Variety of utensil handles suit different needs



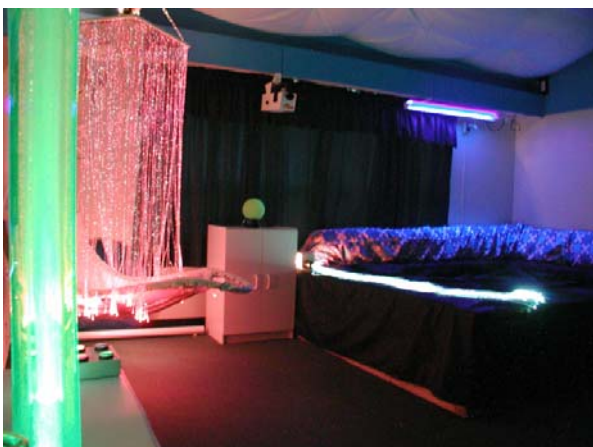
Large handle for weak grasp

A Study in Dark and Light

Sometimes he sits in the dark room, perhaps on the edge of the waterbed, surrounded by soothing music, streaming fiber-optic lights, and colorful abstract images that dance across the wall and ceiling. While it may sound like a Timothy Leary experiment, it's just Skip O'Neal setting up the Snoezelen Room for a session with one of his clients.

The Snoezelen (pronounced snooze-lin) approach was originally developed in Europe during the 1970's to serve adults with severe mental disabilities. Profound mental retardation manifests in disordered sensory processing, O'Neal explains, creating confusion when these individuals engage in or try to tolerate daily tasks such as bathing, eating, or communicating. These tasks can quickly become frustrating and even overwhelming for them. The Snoezelen environment has been shown to: decrease the effects of sensory overload; enhance emotional and physical relaxation; increase range of motion, encourage awareness and exploration; enhance functional communication; and reduce agitation and maladaptive behaviors.

The Snoezelen Room at Caswell Center houses more than 40 pieces of unique multi-sensory equipment designed to gently stimulate the senses through movement, touch, aroma, sound and visual experiences. It is available to all Caswell's individuals and staff that accompany them for therapeutic or leisure sessions. O'Neal estimates that about 25 to 30 different individuals visit the room each week for sessions lasting as long as one hour. One of his clients, a middle-aged man with autism, visits the Snoezelen Room twice weekly. O'Neal says that during his earlier visits he would withdraw into a corner of the waterbed. "Now he's so comfortable in this environment that he's made it to the middle of the bed, and he actually makes contact with me," O'Neal adds. Little victories like these make a difference for both staff and individuals alike.



Using Research to Determine Meaning

If you could not speak, how would you communicate your preferences, tell whether you were comfortable, or ask for activities that you might enjoy? For more than 200 individuals at Caswell Center whose developmental disabilities render them unable to speak, this has been a daily quest for understanding.

To help solve this puzzle, the Caswell Center established a biofeedback and psychophysiology program, under the auspices of the occupational therapy department. Biofeedback connects electronic equipment to a computer and sensors to an individual to obtain visual and/or auditory information about that individual's muscular and nervous system. Psychophysiology refers to physiological information--such as heart rate, breathing, and skin temperature—to provide insight into a person's subjective or personal experience.

Since biofeedback benefits both the client and the therapist, there are many ways it can be applied to measure individual experiences. A care provider may wonder: will dimming the lights make bathing less stressful for Margie? When I feed Ray, does making eye contact or conversation agitate him? A biofeedback session can provide clues that lead to individualized adjustments and better comfort levels.

For many individuals functioning in mild to moderate ranges of mental retardation, high levels of anxiety are common, making it hard for them to regulate their emotional response to situations and people. Biofeedback assisted relaxation training is being used to teach them how to calm themselves so they are less prone to negative outbursts.

The biofeedback laptop computer can be customized to feature animations or music an individual has indicated he or she enjoys, making a session more meaningful to both the client and the therapist. One individual, assigned to weekly physical therapy sessions after surgery on her Achilles tendon, uses biofeedback to guide her muscle strengthening exercises. O'Neal, who operates the biofeedback equipment during these sessions, said: "Once she figured out she could cause an animated face to smile or Amazing Grace to play by flexing her foot, she really started working on regaining strength in her leg muscles. Now she's singing along when she hears the music."

Community Partnerships

Skip O'Neal partnered with Dr. Beth Velde, assistant dean in the School of Allied Health Sciences, and associate professor in the Department of Occupational Therapy at East Carolina University, to conduct research on psychophysiology and biofeedback. They coauthored the article, "Using Snoezelen with Adults with Severe or Profound Mental Retardation," which was published in the journal, *OT Practice*, on November 13, 2006. Mr. O'Neal and Dr. Velde are expanding their research in this area over the next year, assisted by two ECU Occupational Therapy graduate students. O'Neal also consults regularly with Dr. Carmen Russoniello from the ECU Biofeedback and Psychophysiology Lab about cases at Caswell Center.

The Kate B. Reynolds Charitable Trust provided the bulk of funding for both the Snoezelen and biofeedback equipment, supplemented by grants from the Knights of Columbus and the Caswell Center Foundation.