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Project IPAL: Enhancing the Well-Being of Elementary School Children

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Abstract

In Louisiana, 33% of adolescents and 28% of children are overweight or obese (Louisiana Department of Health and Hospitals, 2011). It is projected that as many as 24,000 more children in Louisiana may become obese by 2020 if the trend continues (Broyles et al, 2011). Researchers have identified several strategies to address overweight among youth, but more work needs to be done in our classrooms to teach university students the skills necessary to become real-world ready for working with children and adolescents who struggle with weight management.

The American Academy of Pediatrics (see Barlow, 2007) and the United States Preventive Services Taskforce (2010) recommended intensive counseling for every child with obesity by 2 to 6 years of age. This counseling is a multi-component approach that includes psychosocial principles of goal-setting and self-monitoring as well as behavior modification to become more physically active and improve dietary intake. Based on these recommended guidelines, an estimated 23.9 million overweight or obese children aged 2–19 years will be referred to intensive counseling (Ogden, Carroll, Kit, & Flegal, 2014). Based on recently published costs for family-based behavioral treatment (Epstein et al., 2014), providing these children with the recommended counseling will cost \$44.3 billion each year. Given that childhood obesity is even more prevalent in Louisiana, it is important for students pursuing the health and educational trajectories within our Family and Consumer Sciences (FCS) programs to have a strong skill set for working with children and youth who struggle with weight management.

Project I-PAL

An FCS-related project called Project I-PAL (Interactive Physical Activity Lab) was conducted at Southeastern University in Hammond, LA. The project's intent was to create an FCS classroom space that would accommodate digital health technology and fitness equipment designed specifically for children and adolescents. A traditional classroom was transformed into a practical teaching space where faculty and students work with youth and their families to help them develop healthier lifestyles. The latter is achieved by providing

children with unique opportunities to engage in physical activity and to address possible psychosocial issues that may be detrimental to the overall health and wellness of youth.

Louisiana State University's Pennington Biomedical Research Center (Pennington Biomedical) partnered with Southeastern University and provided specially-outfitted, youth-sized fitness equipment that is used in the teaching space. Additionally, a video conferencing system now allows the research faculty at Pennington Biomedical to be involved in teaching-related experiences within the classroom.

As Project I-PAL grows, it has the potential to have an impact on an even broader group of students and faculty. Many courses within FCS programs have practical components whereby students must demonstrate mastery of course content and their ability to apply concepts in a real-world setting; this interactive classroom provides that hands-on opportunity.

During the semester, undergraduate and graduate students engage in activities designed to prepare them to work with overweight children/youth and their families. The students learn how to communicate effectively with children/youth on issues related to nutrition; physical activity; problem-solving; coping with bullying, teasing, and stress; and making good choices to help them achieve health goals. Because each child/youth is unique, students learn techniques for working with individuals of different ages and developmental stages, as well as different genders, cultures, and family dynamics. The interactive classroom is a one-of-kind space designed to bring together several facets of well-being.

This project has many benefits. Project I-PAL enhanced the FCS curriculum. Through their interaction with this project, FCS students are exposed to evidence-based knowledge and techniques. Students who interact with children and families through the I-PAL complete mandatory training on research ethics through the Collaborative Institutional Training Initiative. Students also undergo training regarding data confidentiality and privacy requirements. Students who choose to complete a Childhood Obesity Management internship experience with Project I-PAL also learn basic research methods including literature reviews and critical analyses of published studies, basic statistical and analytical design, data collection and research protocol adherence, and controlling for bias and confounders.

Importantly, the technology and activities incorporated into Project I-PAL are those that students will encounter in their future workplace. Specifically, becoming adept at videoconferencing and the video conferencing system equips students to telecommute and teleconference, skills that are expected among modern professionals. Furthermore, the measurement devices and physical activity tools used in Project I-PAL are state-of-the-art and make students comfortable and adept at integrating technology into the workplace.

For students concentrating in Nutrition within the FCS program, for example, the heart rate monitors and self-report instruments used to assess children's eating behaviors are tools that students can use as dietetics and nutrition professionals. For students concentrating in Family Studies and pursuing certification as Family Life Educators, learning to use

technology such as video games and cardio equipment to support positive family interaction will prove useful in their own use of innovative approaches to counseling.

Finally, Project I-PAL includes student-led workshops for parents that are intended to be the culminating project of the Childhood Obesity Management internship. FCS students design these workshops based on instructional materials from their classroom learning in conjunction with the hands-on learning they acquired during their internship. These workshops serve to address a need in the community to educate parents on how to promote healthy behaviors within their families.

Drawing upon several of the FCS Body of Knowledge cross-cutting themes (i.e., basic human needs) and FCS specializations (i.e., food, health, wellness, and relationships), Project I-PAL provides an enriching experience for undergraduate and graduate students while also providing needed physical activity and health promotion opportunities for young children. FCS faculty, students, and members of the community continue to benefit directly from Project I-PAL. Plans to expand the program to reach more children and their families are underway, supported by the search for additional funding.

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