



TUESDAY, APRIL 14TH
2PM  VIRTUAL
HIGHLIGHT ACCOMPLISHMENTS IN
SERVICE-LEARNING



SERVICE-LEARNING
OFFICE OF LEADERSHIP & COMMUNITY ENGAGEMENT



LEARN



SERVE



REFLECT

Annual Showcase
Georgia Southern University
Virtual

April 14, 2020

Eagle Showcase: Excellence in Service-Learning

**Office of Leadership and Community Engagement
and
The Honor Society of Phi Kappa Phi**

2:00 PM— Opening Remarks (central room)

Participant & Faculty Recognition Dr. Urkovia Andrews, Assistant Director for Service-Learning

Service-Learning Facilitators Recognition Dr. Urkovia Andrews, Assistant Director for Service-Learning

2:15 PM—Poster presentations begin (breakout rooms)

3:30 PM—Award Ceremony

Graduate Poster Submissions

Diabetic Care Program Expansion in Bulloch County through Grant Writing and Service-Learning

Authors: Dwight Williams and Zahra Shahin

Faculty Mentor: Dr. Yelena Tarasenko

Course: PUBH-9135 Pub Hlth Funding and Grants

The Hearts and Hands Clinic is a community-based volunteer clinic providing free medical, dental, and vision services for medically uninsured adults residing in Bulloch County with an income at or below 200% of the federal poverty guidelines. The Hearts and Hands Clinic currently serves over 450 patients. As part of public health funding and grants course, doctoral students and faculty collaborated with the clinic's executive director to develop a grant proposal. The goal was to secure funding for expansion of clinic's existing diabetes program to meet needs of growing patient population. Upon completion of this engaging and collaborative service-learning activity, students learned about the community, socio-demographic composition of Bulloch County, the opportunities for and challenges of providing free care services, and the need for sustainable programs. Students also learned how to work in a team and use their skills and knowledge to improve health outcomes in the local community.

Georeferenced, 3D, Point-Cloud Model of Statesboro Bulloch County Park, City of Statesboro, GA

Authors: J. Liweng Manzano and Sudeep PANGENI

Faculty Mentors: Dr. Gustavo Maldonado and Dr. Marcel Maghiar

Course: CENG 5435G: Intro to Terrestrial LiDAR

This work consisted in the generation of a georeferenced, 3D point-cloud model of Statesboro Bulloch County Park (16.1 acres), in Georgia, via laser scanning. The above authors, all graduate students in the Civil Engineering program at Georgia Southern University, completed it in Fall 2019. They used an accurate Global Navigation Satellite System (GNSS) device to georeference the resulting final model into the Georgia East, State Plane Coordinate System. This complements a larger hydrologic model of the entire basin of the City of Statesboro. EMC Engineering Services, is one of the companies involved in that larger basin model. Civil Engineer Jeremy Hart, from EMC, indicated that the scope of the work originally included a topographic survey of the mentioned park area, but was removed due to City budget restraints. Therefore, the model of the park area was completed by students as a service-learning activity and donated to the City of Statesboro.

Recommendation for Increasing Health Department Utilization in Rural Georgia

Authors: Doyinsola Babatunde, Elisabeth Myers, Samuel Nwaobi, Fadumo Ragge, and Jessica S. Schwind in partnership with the South Central Health District of Georgia

Faculty Mentor: Dr. Jessica S. Schwind

Course: EPID-7230-A: Social Epidemiology and Health Equity

Since 2010, hospital closures have impacted rural communities across the United States. These closures have affected local economies, as well as healthcare access, service availability, and outcomes of care for community residents. In response, county health departments play an increasingly important role in ensuring quick and easy access to essential health services across rural America. Despite the documented benefits of county health departments, the South Central Health District of Georgia reported low rates of service utilization across many subpopulations within the past five years. The primary objective of our JPHCOPH Social Epidemiology and Health Equity service-learning project was to identify influencing factors on health department utilization in communities and develop evidence-based, rural-focused recommendations for increasing utilization in our counties of interest. County health departments should develop innovative solutions to meet the specific needs of the rural communities they serve, which can help ensure sustainability of the health services offered.

Safety hazard minimization of construction activities with the implementation of BIM models into Virtual, Augmented, or Mixed Reality devices

Authors: Sudeep Pangeni and Dr. Marcel Maghiar

Faculty Mentor: Dr. Marcel Maghiar

Course: TCM 5333- Building Information Modeling (BIM)

A service-learning activity is integral part of an ongoing research project to identify, explore, and minimize hazards for certain construction activities with the use of 3D models, Virtual, Augmented, or Mixed Reality (VR/AR/MR) devices in case studies. Piedmont Construction Group is the community

partner willing to share projects for potential hazards discovery and further exploration. This study is related to Construction Safety (TCM 2430) and BIM (TCM 5333) course concepts. Despite numerous research studies, safety guidelines and procedures there are still fatalities and serious injuries on jobsites. This endeavor seeks to find and address hazards which are properly identified through BIM implementation in VR technology. Therefore, it could potentially decline the most hazardous tasks during construction execution. Also, it provides an opportunity to better understand causes of hazards on selected construction activities and it serves the community by showing evidence toward safety hazards minimization through qualitative and quantitative inquiries.

The Hearts and Hands Clinic's: Community Response Project for Oral Health

Authors: Carla Cooper, MPH; Delores Quasie-Woode, MPH; Assegid Roba, MSc

Faculty Mentor: Dr. Yelena Tarasenko

Course: Public Health Funding and Grants

Hearts and Hands Clinic is a community clinic aimed at promoting healthy living and health education by providing free primary health services for citizens of Bulloch County, who are medically uninsured and have an income at or below 200% of the federal poverty guideline. As the clinic needed to secure funding to expand its oral health services, students, faculty, and community partner completed a service-learning project as part of the doctoral course on public health funding and grants. Specifically, students developed a grant application for the DentaQuest requesting resources for hiring one hygienist; increasing the number of beneficiaries receiving dental care by 100%, and conducting 40 weekly oral health education sessions at the clinic. The primary lesson learned from this project was how to prepare a strong application and how to use applied learning for social change.

Service-Learning Tasks leading to Accurate Ground Points to Georeference Virtual 3D Models of a Commercial Property

Author: J. Liweng Manzano

Faculty Mentors: Dr. Gustavo Maldonado and Dr. Marcel Maghiar

Course: CENG 5436G: Intro to Close-Range Photogrammetry

This work was completed to establish accurate ground control points on the site of a commercial property in Statesboro, GA. The property is El Sombrero Restaurant at 879 Buckhead Drive. Those points were employed to georeference virtual 3D models of that property, produced by a group of students as a pro bono activity for the owner. That is, the tasks involved in this work complemented the ones developed by the referred group of students. In particular, the author followed a novel approach, developed by his graduate advisor, to accurately establish the needed georeferencing points. The models can be used as virtual surveying tools to redesign/modify the property or to upload them online to advertise the related business. The author is thankful for the opportunity to learn a novel and

accurate technique, and use skills and knowledge in a real-life situation that benefits a member of the local community.

Food Waste Recycling and Education to Promote Sustainability at Georgia Southern University and the Community

Authors: Paige Perry, Caitlin May, and Elijah Legg in partnership with Georgia Southern Dining Commons Staff and Students

Faculty Mentors: Dr. Evans-Afriyie-Gyawu, Dr. Padmini Shankar, and Dr. Vinoth Sittaramane

Courses: PUBH 4232 A & NTFS 3534

This objective of the study conducted is to promote outreach and awareness of food waste and encourage sustainable solutions. We aimed to increase awareness of food waste and discuss its consequences and solutions for reducing it and provide educational events for students, staff, and the local community.

The results indicated that food is wasted in Georgia Southern dining facilities at a rate of more than half a pound of food per student per day. This school year, students and faculty have conducted a Food Sustainability Forum, in-service training to GSU dining commons staff, developed a method to feed local fish from food waste, provided food compost for Anthony's Roots farm. Upcoming events include a food demonstration at the Statesboro Farmer's Market, and Food Sustainability Education at Statesboro high schools.

Thus far, many have expressed they have developed and maintained new methods to help maintain a sustainable environment.

Assessing county health department service utilization across the South Central Health District of Georgia

Authors: Anaje Smith, Joana Tome, Julian Kyles, Kira Bell, Logan Cowan, Jessica Schwind

Faculty Mentor: Dr. Jessica Schwind

Course: Social Epidemiology and Health Equity

Many rural hospitals across the United States closed in the last decade due to changes in the nation's healthcare infrastructure. As such, rural communities continued to experience major health issues less common among their urban counterparts, such as decreased healthcare access and life expectancy declines. The South Central Health District of Georgia was also impacted as county health departments reported underutilization of services and resources. The objective of this service-learning project was to describe the health department utilization

across ten counties and compare demographics to better understand subpopulation trends. To achieve this objective, data was obtained from the U.S. Census Bureau and the district to explore possible reasons behind reduced health department utilization. Variables included patient visits by program and sociodemographic characteristics such as sex, age, race/ethnicity, and insurance status. Our project findings suggest strategies should be implemented to increase health department utilization by targeting specific subgroups of the population.

Undergraduate Poster Submissions

Interactive Activity: Balloon Tennis

Authors: Allena Cox, Chelsea Wainwright, Courtney Rogers, Clara Jordan Wynn

Faculty Mentor: Dr. Jennifer Zorotovich

Course: CHFD 3136: Adult Development & Later Life

Our interactive activity Balloon Tennis will be used for older adults at the Bulloch County Parks and Recreation Department. This activity will help older adults in three domains: physical, cognitive, and social. These domains are crucial for older adults to remain active, aware, and maintain social skills within their lives. The physical domain will be impacted by using arms and legs if participants are moving throughout the activity as well as improving muscles and respiratory system. We are using balloons which allows for older adults to have more time to move and get around. In the cognitive domain, participants will be able to use cognitive function by thinking about their next move about where they need to hit the balloon. In the social domain, the participants will actively talk to know who is going to be hitting the balloon, where other teammates need to move, and encouragement for each other.

There will be blood: Period Poverty on College Campuses

Author: Nora Cook

Faculty Mentor: Ms. Christy Mroczek

Course: Writing for Nonprofit

In a recent study, it was found that 46% of Independent college students live at or below the poverty line. 29% of them have had to miss school or work because of their lack of access to period products. Launched in August of 2019 after securing a national partner, The Homeless Period Project, and the support of the Dean of Students, I created the Period Pantry to serve students who need menstrual products. To kick off, we hosted a "Packing Party" inviting student volunteers to assist in packing pick-up bags. We now serve 12 clients directly, and we provide emergency baskets in 6 bathrooms across campus. Through coursework in Writing for Nonprofits, I have explored more options for cultivating awareness and community building through creating marketing communication. Spearheading this initiative has shown me the true scope of poverty but also the abundance of human kindness.

Interdisciplinary Service-Learning: Designing a Bedroom for a Domestic Abuse Shelter

Authors: Eryn Williamson, Courtney Johnson, Skylar Yarbrough, Kristin Spencer, Haley Clark, Kalyn Levens, Ryan Couillou, Beth McGee

Faculty Mentors: Dr. Ryan Couillou & Dr. Beth McGee

Courses: PSYC 4630 Senior Seminar & INDS 4446 Design Studio V

This service learning project incorporated Psychology and Interior Design Senior Undergraduate students together with the task of researching and then designing new typologies for five room types in a proposed new facility for Safe Haven, a local shelter for domestic abuse victims. During the project, students worked in interdisciplinary groups to provide evidence-based design recommendations for a specific room in the shelter. Additionally, a site visit was incorporated to better understand the unique user needs and restrictions necessary when designing for this special population. The assignment included eight components that were scaffolded toward the final deliverables, which were a final paper, floorplan and three-dimensional renderings of the proposed design. These were based upon the earlier group research, needs assessment and recommendations. The results were presented to the Safe Haven staff. This group focused on the bedroom where victims spend a considerable amount of time recovering and storing their personal belongings.

3D Photogrammetric Model of Business Property in Statesboro for Future Modifications/Additions

Authors: Krysta Davis, Steven Bowen, Joseph Lane, Jacob Lariscy, Raeb Moore, Andrew Purchell, Tyler Robledo, and Liweng Manzano

Faculty Mentors: Dr. Gustavo Maldonado and Dr. Marcel Maghiar

Courses: CENG 4539 (Sr Project) and TCM 4530 (Sr Project)

This work consists in a service project employing close-range photogrammetry to generate a three-dimensional, point-cloud model of a 4.7-acre commercial site, including two buildings of El Sombrero Restaurant, at 879 Buckhead Drive, Statesboro, GA. It is authored by two groups of Senior-Project students, one majoring in Civil/Construction Engineering and other in Construction Management, at Georgia Southern University. They completed this work as a service-learning project during the Fall-2019 academic term. The final model is donated to the owner of the mentioned restaurant to be used as a free and accurate virtual surveying tool to assist in the design of future modifications/additions to the existing structure, topography and surrounding parking areas. The resulting model could also serve as a marketing resource for the business. This project allowed students to learn state-of-the art techniques and, at the same time, provided them with opportunities to serve a member of the local community.

Interdisciplinary Service-Learning: Designing an Advocate Resource Center for a Domestic Abuse Shelter

Authors: Melissa Harel, Anna DeLoach, Natalie Pethke, Beth McGee, Ryan Couillou

Faculty Mentors: Dr. Ryan Couillou and Dr. Beth McGee

Courses: PSYC 4630 Senior Seminar; INDS 4446 Design Studio V

This service learning project incorporated Psychology and Interior Design Senior Undergraduate students together with the task of researching and then designing new typologies for five room types in a proposed new facility for Safe Haven, a local shelter for domestic abuse victims. During the project, students worked in interdisciplinary groups to provide evidence-based design recommendations for a specific room in the shelter. Additionally, a site visit was incorporated to better understand the unique user needs and restrictions necessary when designing for this special population. The assignment included eight components that were scaffolded toward the final deliverables, which were a final paper, floorplan and three-dimensional renderings of the proposed design. These were based upon the earlier group research, needs assessment and recommendations. The results were presented to the Safe Haven staff. This group focused on the advocate resource center where there is 24/7 support for victims via counseling and hotline.

Non-Georeferenced, LiDAR-Based Model of Statesboro Bulloch County Park, for the City of Statesboro, GA

Authors: Baughman Goodin, Guisella Hernandez, Donaldson Johnson, Nicholas Johnson, Adam Jones, and Abdoul Ouangre

Faculty Mentor: Dr. Gustavo Maldonado

Course: CENG 5435 (Intro to Terrestrial LiDAR)

This service-learning project involves the generation of a relatively large, non-georeferenced, 3D model of the Statesboro Bulloch County Park, in Georgia, via Terrestrial Light Detection and Ranging (LiDAR). The above authors, all undergraduate students in the Civil Engineering program at Georgia Southern University, completed it in Fall 2019. They used 83 different positions of a laser-based scanner, Leica Geosystems C10, and stitched them to generate the final 3D model. This product is donated to the City of Statesboro to serve as a free virtual surveying/measuring tool of the whole park area. Accurate measurements can be extracted from the model to design future modifications and structural additions to the park. During this activity, students collected data in the field and post-processed it in numerous laboratory sessions. They learned a modern and powerful surveying technique and provided a service to the City of Statesboro which needed a topographic survey of the park.

Service-Learning at the Lodge at Bethany

Authors: Hillary Kaplan & Dr. Rebecca Ryan

Faculty Mentor: Dr. Rebecca Ryan

Course: PSYC 4630B Senior Seminar: Psychology and Service

I currently have the privilege of volunteering at the Lodge at Bethany which is a residential care facility for older adults where they offer traditional care and dementia care. They strive to create a loving and comfortable environment for their residents along with offering countless activities to participate in. While volunteering I facilitate activities and socialize with the residents. I have had the opportunity to get to know the residents and observe psychology terms and apply them. Thus far, I have seen examples of psychological concepts including; activities of daily living, dementia, intrinsic motivation, and cognitive reserve hypothesis. Overall, I have gained an improved ability to recognize psychological concepts in real life settings. The primary course objective for my senior seminar class is to allow senior level psychology majors the opportunity to display their ability to recognize and apply previously learned psychological concepts.

Impacting the Community through STEM Learning

Authors: Rachel Thomas, Zachary Barrow, Alexis Kopp, Sharnae Pegues

Faculty Mentor: Dr. Heidi Eisenreich

Course: Math 2008

The service-learning project was a part of the larger community outreach program sponsored by COSM and STEM, called STEMfest. As part of our Math 2008 class we set up an interactive activity to introduce children to the science, math, engineering and technology-based fields. We used Georgia based mathematics standards to create appropriate questions related to statistics that we will also use as teachers. The objective was to gain familiarity with the standards writing appropriate grade-level questions related to content we're learning about in our current mathematics course. At the event, we used the questions we created to ask students about the data collected. While children used critical thinking and different strategies to answer our questions, we differentiated in real time to help struggling students. The project was a way to tie our interest in teaching to the learning of children in the community outside the classroom.

Service-Learning at Restoring the Breach

Authors: KaTerra Johnson & Dr. Rebecca Ryan

Faculty Mentor: Dr. Rebecca Ryan

Course: PSYC 4630B Senior Seminar: Psychology and Service

The Psychology and Service course has an objective that allows senior psychology majors to volunteer in the community and apply the knowledge acquired in previous psychology courses, such as Lifespan Development and Social Psychology, to the things experienced while serving the community. I am currently completing my service-learning at Restoring the Breach. My service is tutoring children from ages 7-12 in math, English, social studies, and science. I help students one-on-one to learn the material they are having trouble understanding. They receive practice problems from me or bring their homework. Thus far, I have seen and written about examples of psychological concepts including altruism, positive reinforcement, bullying aggression, and illusion of invulnerability. I have learned that children need more one-on-one interaction when it comes to learning because they sometimes do not grasp the information as fast as their teachers are teaching it. I have learned that it takes a lot of patience and understanding when interacting with children. I have learned that I have a passion for helping children. Their environment can have an impact on how they turn out in the future, so I want to be able to assist them in having the resources they need to be successful in the classroom.

Many thanks to our judges:

Dr. April Garrity, Associate Professor, Waters College of Health Professions

Dr. Karin Fisher, Assistant Professor, College of Education

Ms. Carlene Robinson, graduate student, DrPH in Epidemiology

Celebrating Excellence in Service-Learning

According to Georgia Southern's mission statement, "The University provides transformative learning opportunities to meet the needs of a diverse student population through its legacy of commitment to academic excellence and personal attention. Through the shared resources of its multiple locations, the University creates vibrant learning environments that foster an inclusive, student-centered culture of engagement designed to prepare students for lifelong service as scholars, leaders, and responsible stewards of their communities." In keeping with the mission, through numerous service-learning activities, students and faculty contribute to the university and local community. In an effort to celebrate such contributions, the Office of Leadership and Community Engagement, in partnership with The Honor Society of Phi Kappa Phi, presents the annual Eagle Showcase: Excellence in Service-Learning. All Georgia Southern University students, graduate and undergraduate, were invited to showcase their service-learning projects. We hope this showcase will connect you to meaningful service-learning opportunities and encourage you to build partnerships and address genuine community needs.

Showcase Organizing Committee

Dr. Urkovia Andrews, Assistant Director for Service-Learning

Dr. Padmini Shankar, Professor, Nutrition and Food Science

Ms. Angelique Jennings, Graduate Assistant for Service-Learning