OCHSNER HEALTH – EDUCATION OUTREACH, K-12 SCHOOL PARTNERSHIPS

Since 2005, Ochsner Health has positively impacted over 80,000 students and teachers through STEM Education and Early Career Awareness programs. Following a model of engagement, exposure, exploration and experience, students and teachers from early education through high school have access to cost free programs that include: job shadows, field trips and internships, teacher professional development and externships, i/Lab hands-on laboratory science experiences, scientist in the classroom, and full-time summer immersion programs. Since 2005, Education Outreach has earned over $1.5 million in funding for STEM Education Programs, including $1.2 million from the highly competitive Science Education Partnership Award from the National Institutes of Health. The American Hospital Association has highlighted Ochsner’s Education Outreach programs in their Community Spotlight publications and Ochsner received the Partner of the Year award from the Louisiana Chapter of the National HOSA Organization.

Partnering with like-minded organizations, teachers and students is a critical key to our success. Our Ochsner Teacher Advisory Board includes teachers from 7 parishes throughout the state who help to guide and form our curriculum and program development. Our STEM Ambassadors are students with a strong interest in health sciences who volunteer and advise on hands-on STEM programming. Additionally, we benefit from strong, long term partnerships with organizations like LSU Health Sciences, Tulane Center for STEM Education, STEM NOLA, GNO STEM Initiative, Cyber.org, NEPRIS, Youth Force NOLA, Junior Achievement and many others.

All of our programs are vigorously measured for impact. Each initiative has a unique set of goals to measure in addition to a few consistent metrics including, content knowledge, self-efficacy, overall program satisfaction and organizational affinity. Overall, students have shown a

- 76% of participants have increased confidence in becoming a STEM professional
- 59% increase in their ability to see real world relevance in school learning
- 60% of participants are more likely to pursue a career or care at Ochsner Health

In response to consistent and strong recognition of STEM program excellence, a large need in our community and established trusted relationships, in 2019 we received approval from the Jefferson Parish School Board to partner with Discovery Health Sciences Academy to develop an open-enrollment, public charter school in Jefferson Parish. In 2020, the Dr. John Ochsner Discovery Health Sciences Academy opened it’s doors as part of the 50/50 charter school partnership. When fully enrolled the PreK-8th grade school will educate nearly 800 students with top rated, nationally recognized Discovery Health Sciences schools.

Research has shown that students, especially minority students, benefit from hands-on science experiences with authentic real-world themes. Education Outreach has developed strong health sciences curriculum that draws on health issues such as diabetes, cancer, and communicable infections that directly impact students’ lives. By linking science learned in school with real world applications, students are motivated to engage more deeply in their science learning. Current K-12 students cannot become the next generation of healthcare leaders if they do not have a strong educational foundation with a science focus. This is an area of concern as several recent reports show Louisiana at the bottom of national education statistics. The 2019 Quality Counts report published by the Education Week Research Center gives letter grades to state K-12 schools based on chance for student success post school, school finance, and K-12 student achievement. Louisiana ranked 47th out of 50 states, receiving a D+ overall grade. In the K-12 student achievement category, Louisiana performed the worst of all the states with a devastating score almost 13 points below the national average. The College Board, administrators of the ACT college admissions test, report that only 10% of 2018 Louisiana high school graduates met the STEM college ready ACT benchmark. This benchmark means that the student has a 50% chance of earning at least a “B” or 75% chance of earning at least a “C” in a college level introductory level science, technology, engineering or math class. Individual subject college readiness ACT benchmark achievement was only marginally better at approximately 25% for either science or math alone. These disturbing statistics indicate the need for high-quality, standards-aligned curriculum interventions in the sciences for Louisiana students.

In addition to college and career readiness, access to quality educational opportunities is an important social determinant of health. Data in the School Success: An Opportunity for Population Health: Proceedings of a Workshop document published by the National Academies of Science, Engineering and Medicine show a direct correlation between educational attainment and overall health. This trend persists even when access to care is equal, indicating the strong role of education in lifetime health. Education Outreach programming provides a means to directly impact educational attainment in our region. By equalizing educational opportunities, we simultaneously impact health disparities within our communities.

Updated 3.2021 A. Sharai, R. Fisher PhD, S. Messina MS