# Were robots invented in 1464?



#### 2018-2019 ANNUAL REPORT

Leonardo da Vinci sketched plans for a humanoid robot as early as 1464. His robot was to be controlled by pulleys and cables and was designed to look like an armor-clad knight.



**Immediate Success:** December of 2019 marked our 18th month in operation as the new Hands On! Discovery Center. In the year-and-a-half since re-opening, we have seen remarkable growth in number of visitors and school field trips. Total attendance has increased over 150% and school field trips have increased over 227%. Our collaboration with ETSU and relocation to the Gray Fossil Site has resulted in a dynamic one-of-a-kind community institution.

**An Ideal Situation:** With over 18,000 square feet of available exhibit space for brand new exhibits, a turn-key ADA accessible museum-designed facility, a parking lot, and central location for the entire region, Hands On! crossed many historical challenges off its list before the first new exhibit was purchased. Furthermore, ETSU would be able to redirect funding previously used for museum operations and use it for

research. Three and a half years after the agreement was signed, this collaboration has exceeded even the most optimistic expectations.

**One-of-a-kind:** Very few places in the country offer our unique blend of hard science and whimsical curiosity. We rediscovered the core of our mission by introducing new exhibits that truly live up to our intended community impact. Each exhibit is deeply interactive and connected to the State of Tennessee Department of Education learning standards for K-12 students. We wanted to create an environment where people put their phones away and interact with the content and connect with each other, whether it be a family or school group.

The foundation of our success is our passionate staff, committed board of directors, and the deep support from our region. We can't wait for what's next!





## **IMPACT ON THE REGION**

The Hands On! Discovery Center's collaboration with East Tennessee State University exemplifies how a mutually beneficial partnership benefits the entire region. No longer burdened with century-old buildings and infrastructure at the old location, HODC is now able to funnel revenues and gifts almost entirely to programs and exhibits. Furthermore, HODC is able to bring hard science to life for thousands of visitors through the ongoing research at the world-renowned and unique Gray Fossil Site.

In the first year HODC has become a true tourist attraction as well. People from all 50 states and over two thirds of Tennessee counties visited HODC. The location in Gray is now equidistant between Johnson City and Kingsport and more accessible to far-traveling school groups as well. We are truly everyone's museum.





welcomed visitors from **all 50 states** and 15 foreign countries



welcomed visitors from 2/3 of Tennessee Counties



66% of visitors live outside of our immediate service region



#### **IMPACT ON THE WORKFORCE**

Together, an integral web of workforce development is woven for children as they grow up in the region. Much like achieving fundamentals in any sport or activity leads to success, a tangible and fundamental approach to science will lead children to life-long interest, understanding and ultimately a career in a science related field.

Hands On! Discovery Center regularly partners with local companies and schools that host STEM career-focused events for local students.

We offer employment opportunities and internships as well as volunteer opportunities for students that provide experience in the areas of education, marketing, museum studies, and occupational therapy.





\$3.5 million economic impact on the local economy



**1,032 hours** worked by student volunteers and interns



270% growth in teacher professional development





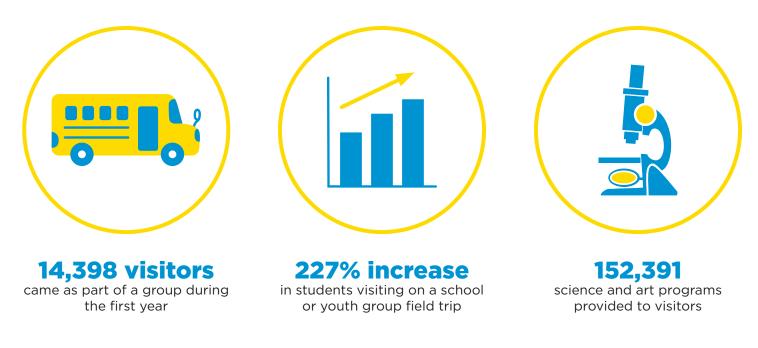
#### **IMPACT ON EDUCATION**

Hands On! Discovery Center is often a child's first introduction into a deeper and meaningful level of STEM learning. The goal for HODC is to attract interest in interactive STEM learning and then keep that attention as a child grows. With adaptive programming and constantly changing exhibits, content grows with the audience over time.

To do this, HODC offers unique learning opportunities in ways not ordinarily found at home or in the classroom. The core of the HODC mission is to make learning fun through memorable experiences. While access to technology is abundant for today's youth, the idea of utilizing imagination to experiment, design, and actually build something has become less available and less appreciated. One of the primary strategies for HODC is to bring people together to



problem solve and create through interactive and proven exhibits. Parents and children alike are encouraged to put their phones away and interact with each other through the power of play and informal learning. The foundation to STEM education is critical thought, open exploration, creative discussion, and tactile experiences.





### **IMPACT ON FAMILIES**

Visitors are now welcomed in a well-lit and exciting new facility that eliminates the challenges faced at the old location. These included worn-out exhibits, limited public parking, ADA accessibility, and needing updated restrooms on the main floor in a century-old building that required expensive upgrades and repairs. We estimate that the relocation to the Gray Fossil Site saved \$13 million in fundraising and allowed us to focus on the exhibit and program content resulting in an improved guest experience.

New exhibits were carefully selected to provide all new open-ended experiences that would allow the entire family to be engaged. In a time where the trend is all digital, the experience at the Discovery Center encourages guests to put down their devices and interact together to create family memories they can share for a lifetime.



The blend of science, art, and natural history with an active fossil dig site and on-site prep lab makes it the only one of its kind.

