# **Courage Hope Care Institute Executive Summary**

#### Introduction

The CHC Institute is a nonprofit organization established by Dr. Lan Joo, its founder and CEO, with the mission of providing underprivileged children equal access to STEAM (Science, Technology, Engineering, Arts, and Mathematics) education. The institute aims to help children develop the essential skills needed for success in a rapidly changing world. By offering high-quality, free STEAM programs to children in underserved communities, CHC Institute works to bridge the STEAM educational gap.

## **Program Objectives and Teaching Approach**

The primary goal of our STEAM programs is to enhance children's problem-solving abilities, collaboration skills, critical thinking, and communication techniques. Through our programs, children learn to identify real-world problems, develop creative solutions, and validate their ideas through experimentation. All programs are centered around experiential group projects and utilize diverse STEAM educational materials to foster children's interest and knowledge in science, technology, engineering, arts, and mathematics. Our program is designed for children in grades K-5.

### **Key Programs**

- School-Based STEAM Program in Partnership with DC Public Schools: We offer a free STEAM program to children in underserved communities during after-school hours at partnering DC public schools.
- Community-Based STEM Programs in Partnership with DC Public Libraries: We provide a
  free STEAM program to children at public libraries located in underserved communities during
  after-school hours and throughout the summer.
- Special Activities and Events: We organized field trips and offered free math tutoring at a DC school during after-school hours. Additionally, we host an annual Christmas Gingerbread House Building Event in December and an Annual Awards and Recognition event at the end of the school year. Our organization also participates in STEM fairs at local schools.
- Research and Data Analysis: Dr. Lan Joo leads comprehensive research and data analysis to assess the effectiveness of our programs. At the end of each school year, Dr. Joo prepares an impact evaluation report for each site by analyzing attendance rates, participant surveys, and instructor evaluations. This report helps to identify outcomes and successful factors that contribute to our achievements, as well as areas for improvement. Consequently, the yearly impact evaluation reports allow us to effectively communicate to stakeholders how the CHC Institute contributes to bridging the STEAM education gap. Moreover, Dr. Joo publishes case studies for specific programs and sites to highlight successful outcomes and the factors that contributed to those successes.

### **Key Achievements**

Our program has successfully provided high-quality STEAM education to children in underserved areas, helping to reduce educational disparities. Student satisfaction with the program was high, and there was a strong willingness to re-enroll. Learning engagement was particularly enhanced through experiential projects, which had a positive impact on students' problem-solving and collaboration skills. These projects effectively complemented the limited resources and curricula available in public school STEAM education. Additionally, our partnership model has ensured program sustainability and has successfully increased community and parental interest and awareness in STEAM education.

#### **Future Plans for Sustainable Growth**

- Leveraging Data and Feedback-Based Insights: We will systematically collect and analyze data to
  evaluate learning outcomes and track growth. This will include gathering feedback from participants,
  parents, and instructors to guide continuous improvement of our program content.
- **Promoting Successful Partnership Models**: We will actively promote effective partnership models that contribute to sustainable growth. By documenting and sharing case studies, we aim to encourage other local institutions to join our efforts in closing the STEAM education gap.
- Maintaining Flexible and Adaptive Program Operations: We will adopt an approach that allows us to flexibly adjust and adapt our program content to meet the unique characteristics and needs of each participant, school, and institution.