

Dr. Talib Karim Muhammad  
Memphis STEM & Leadership  
Summer Academy

Proposal Submitted by **STEM4US!**

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## EXECUTIVE SUMMARY

STEM4US!, a non-profit 501(c)(3) organization, is dedicated to addressing the national shortage of STEM workers by empowering disadvantaged youth and their families through training, mentoring, and job placement in cyber and other STEM-related fields. For over a decade, STEM4US! has engaged and trained thousands of youth as well as their parents in Memphis and across the nation.

### **Background on Dr. Talib Karim Muhammad**

Dr. Talib Karim Muhammad is a Memphis legend. Born and raised in Memphis, TN, Dr. Talib Karim Muhammad attended LaRose and Booker T. Washington. He was schoolmates with other Memphis legends such as Washington, DC Mayor Marion S. Barry and Memphis Mayor, Dr. W.W. Herenton. After high school, Dr. Muhammad served his nation distinguishably in the Korean War as a member of the United States Air Force. Following his military service, Dr. Muhammad enlisted in the fight to end discrimination in his hometown and throughout the nation.

Dr. Muhammad was active in several civil rights era organizations including the Student Nonviolent Coordinating Committee (SNCC), Black Panther Party, and the Nation of Islam. As a member of the Memphis based Invaders, he helped to lead the 1968 Sanitation Workers Strike and served as a security aide to Dr. King during his final trip to Memphis, TN.

After traveling and living around the world, Dr. Muhammad returned to his hometown of Memphis following the death of his wife Dr. Linah Karim Muhammad, in 1987. Together with Linah, Dr. Muhammad launched a STEM-focused child care center and after school program. Starting from the basement of their home, they eventually acquired land in the birthplace of Ford Motor Company, near Detroit, Michigan that was instrumental in training hundreds of children as well as their parents.

With six young children, ranging from 3-17, Dr. Muhammad sought to raise his family in the safe and loving environment, which Memphis offered in the late 1980s. In Memphis, Dr. Muhammad led the Nation of Islam's Temple #55 and later left the Nation and established the Islamic Center of Memphis. He also operated one of Memphis' first upscale middle eastern restaurants, Muhammad's Restaurant on Airways as well as Muhammad's Childcare Center. In addition, Dr. Muhammad was a radio personality on WDIA and WLOK and published his own newspaper, the Independent News.

In 1988, Dr. Muhammad filed the landmark class-action lawsuit, *Muhammad v City of Memphis*, which ended decades of voting rights discrimination in Memphis and Shelby County. This suit led to the election of a generation of African Americans including the Mayors of Memphis and Shelby County as well as majorities on the Memphis City Council, Shelby County Commission, and Memphis and Shelby County School Board.

In 1995, Dr. Muhammad was elected as the first At-Large Member of the Memphis City Council for Super District 8-1. He was also the first Muslim American to serve in elected office in Memphis, Tennessee. Dr. Muhammad served on the Memphis City Council until he died in 1997, at the age of 60.

## **PROGRAM OVERVIEW**

The Dr. Talib Karim Muhammad Memphis Dr. Talib Karim Muhammad Memphis STEM & Leadership Academy continues the legacy of one of Memphis' great sons by engaging at-risk boys in Memphis, grades 6-10. Specifically, this program consists of an innovative nine-week summer away from home experience for boys. Aimed at combating youth violence, academic underachievement, and lack of discipline, the program offers a transformative curriculum that includes academic tutoring, vocational training, personal development workshops, and rites of passage activities. Located on a college campus, the program simulates a collegiate atmosphere, encouraging participants to envision and strive for higher education and other constructive pathways to success.

STEM4US! intends to partner with a network of Memphis-based providers to target 100 of Memphis most challenged boys. Our aim is to take them outside their neighborhoods for the summer to a safe environment for nine-weeks of intensive education, manhood training, and enrichment in cyber, construction, and agriculture fields.

Designed to counteract the cycles of violence and poverty, the program seeks to instill in participants a strong interest in cyber, construction, agriculture and other STEM fields, while offering them a constructive alternative during their summer break. Our strategic approach, backed by a team of seasoned professionals, aligns with the community development and workforce enhancement goals of Memphis Mayor Paul Young.

With robust leadership, a committed program team, and advanced technological support, STEM4US! is poised to deliver an effective and impactful educational experience. We seek funding to launch this summer academy as a comprehensive pathway for young individuals, aiming to transform their lives, by extension, their communities. The Dr. Talib Karim Muhammad Memphis STEM & Leadership Academy represents our commitment to providing valuable STEM skills with real-world applications, fostering personal and community development through education, mentorship, and positive engagement.

### Metrics and Evaluation

Success metrics for the program include a 100% reduction in violent behavior among participants, 25% increase in academic performance (based on pre- and post-program testing), development of practical vocational skills, and enhanced discipline and manhood survival skills. Evaluation will involve pre- and post-program assessments, continuous monitoring, and feedback mechanisms.

### Program Training Features

These training elements ensure that the Dr. Talib Karim Muhammad Memphis STEM & Leadership Summer Academy provides a well-rounded experience for participants. The goal is to emphasize not only academic and personal growth but also the importance of a healthy lifestyle and physical fitness.

**Manhood Training, Rites of Passage Activities:** Will also include lessons on self-discipline, responsibility, self-care and grooming, respect for parents, and mental health. These modules will be taught by trainers with military and/or coaching backgrounds who are experienced in challenging boys and extracting from them maximum performance. This approach is intended to foster a holistic approach to manhood and personal development.

**Cyber or Construction Training:** Students will have the option of choosing an elective of a cyber or construction skills course. For cyber students, they have the chance to learn how to build electronic games and mobile phone applications from scratch. This training will not only provide valuable technical skills but also foster creativity, problem-solving abilities, and teamwork. By the end of the program, the students will compete on building and presenting a group at a Hackathon.

For students electing the construction skills tract, they can expect specialized training in carpentry skills. This training involves twice-weekly workshops.

Through hands-on instruction and practical demonstrations, participants will learn essential carpentry techniques such as measuring, cutting, shaping, and assembling wood materials. Our experienced instructors will guide students through projects that progressively develop their proficiency and confidence in carpentry. Additionally, as a special Saturday activity held twice a month, students will have the unique opportunity to apply their carpentry skills towards renovating a house under supervision.

**Tutoring in Core Academic Subjects:** Researchers report that students experience a "summer learning loss" each year. Specifically, studies suggest that students in grades 6-10 may lose one to three months' worth of learning over the summer, particularly in subjects like math and reading. To combat this loss, our program provides students with daily classes in core subject areas of Math, English, and Social Studies. These classes, 45 minutes each, are designed to review topics that the students likely learned in the past academic year as well as preview subjects that they can expect in the next year. This approach aims to help the student enter the next academic semester with greater confidence.

**Agriculture & Farming Technology Experience:** Weekly, on Saturdays the students have the chance to learn about farming and the technology and other tools used to grow, harvest, transport, and sell the food they eat every day. This program is designed to introduce youth to the science and business of farming and agricultural technology.

**Parenting Education Classes:** Held twice a week in the evenings, these classes will offer parents and guardians valuable skills and knowledge on child-rearing, healthy living, and family management. Trained therapists will be engaged for both group and one-on-one coaching sessions. The program offers alcohol and drug treatment counseling for parents with substance dependency issues. Parents can also count on free laptops, wifi hotspots, and cash incentives to motivate them to help their child complete the program. At the conclusion of the summer, we intend to recognize outstanding parents for their achievement and progress.

**Physical Fitness:** Throughout the program, participants will receive ongoing education and activities focused on maintaining a healthy diet and physical fitness. This will be integrated into breakfast and lunch times, physical activities, and designated health education sessions.

**Uniforms:** The summer academy has adopted a thoughtful approach to student attire by providing uniforms consisting of khakis and polo shirts for academic classes and sweats and t-shirts for athletic, agriculture activities. Uniforms are

designed to foster a sense of unity and belonging among students, eliminating any potential feelings of exclusion or judgment based on personal clothing. By standardizing student wear, the academy aims to create an environment where students can focus entirely on their learning and activities, without the distractions or social pressures that may come with varied attire. This inclusive measure ensures that all students feel comfortable and equal, promoting a cohesive and supportive educational experience.

## **IMPLEMENTATION TIMELINE**

The implementation timeline outlines key milestones from the initial planning phases through to the conclusion of the program. This includes periods for staff recruitment, student enrollment, program delivery, and post-program evaluation.

### **Phase 1: Planning and Funding (March 18 - April 30, 2024)**

- March 18 - April 1: Outreach to potential funding sources; apply for grants; contact local businesses and community organizations for support.
- April 1 - April 30: Follow-up on funding requests; begin drafting contingency plans based on potential budget scenarios; begin identifying summer camp venues.

### **Phase 2: Logistics and Staffing (May 1 - May 28, 2024)**

- May 1-May 10: Finalize venue selection and secure necessary permits; start contracting process with bus vendor for transportation needs.
- May 10 - May 14: Begin recruitment for administrators, counselors, and other necessary staff; launch background checks and initiate training program development.
- May 15 - May 21: Continue staff hiring; finalize contracts with staff and vendors; order supplies and equipment for program activities.
- May 22 - May 28: Conduct intensive training for staff, including manhood counselors; finalize program schedules and materials; ensure all logistics are in place.
- May 28- June 30: Launch effort to secure funding for afterschool program

### **Phase 3: Enrollment and Pre-Program (May 1 - May 28, 2024)**

- May 1 - May 14: Open student enrollment; begin marketing and recruitment activities to fill program slots.

- May 15 - May 21: Hold a pre-program information session for interested families; close student enrollment and finalize participant lists.
- May 22 - May 28: Host orientation event for students and parents; distribute program materials and schedules.

#### Phase 4: Program Delivery (June 3 - July 31, 2024)

- Week 1 (June 3 - June 8): Focus on regular schedule; community service project on Saturday.
- Week 2 (June 10 - June 15): Regular schedule; college campus visit and workshop on Saturday.
- Week 3 (June 17 - June 22): Continue with structured programming; overnight camping trip on Saturday.
- Week 4 (June 24 - June 29): Maintain daily routines; organize a sports day on Saturday.
- Week 5 (July 1 - July 6): Follow the standard schedule; plan for white water rafting trip on Saturday.
- Week 6 (July 8 - July 13): Regular activities; local community service project on Saturday.
- Week 7 (July 15 - July 20): Usual weekday agenda; conduct Hackathon event at Virginia State University from Friday to Sunday.
- Week 8 (July 22 - July 31): Last stretch of regular programming; historical site visit on Sunday and closing ceremony on Wednesday.

#### Phase 5: Post-Program (July 15 - August 15, 2024)

- July 15 - August 15: Finalize hiring of staff for afterschool program, announce to parents and students.
- August 1 - August 8: Conduct program evaluation with staff; collect feedback from students and parents.
- August 1 - August 9 - August 15: Review all feedback; begin planning for future programs; ensure all vendors and staff are paid and contracts closed.

By following this timeline, the Future Leaders Academy can effectively manage the planning and execution phases to ensure a successful summer program, while also laying the groundwork for future initiatives.

## **SCHEDULE: DAILY, WEEKLY**

The Dr. Talib Karim Muhammad Memphis STEM & Leadership Academy operates six days a week, offering a structured blend of academic lessons, vocational training, and personal development activities. Each weekday is dedicated to enhancing academic performance in core subjects and developing vocational skills, while Saturdays focus on community service, field trips, and special activities like farming and survival training. The program culminates in a graduation ceremony where students and parents celebrate the achievements made over the summer.

Each weekday is structured to provide a balanced mix of academic instruction, vocational training, and personal development activities. Youth are encouraged to start their mornings with worship, followed by athletic or military drills, and then breakfast. Like in a regular college environment, students would spend their day in classes in core academic subjects such as language arts, math, and social studies.

Lunchtime would Afternoons focus on vocational training and workshops, while evenings are dedicated to study sessions, mentorship discussions, and recreational activities.

### **Weekdays Schedule (Monday - Friday):**

5:00 AM - Wake Up & Faith Devotion

6:00 AM - Showers, Dress, Dorm room inspection by Manhood Counselors for cleanliness.

7:00 AM - Morning Drill: Military-style exercises focused on discipline.

8:00 AM - Breakfast and Health Education: Focus on a healthy diet and nutritional information.

9:00 AM - Academic Session 1: Focused on core academic subjects.

9:50 AM - Break & Healthy Snack: Emphasis on nutritional value.

10:00 AM - Academic Session 2: Continuation of morning academic lessons.

10:50 AM -Break & Healthy Snack: Emphasis on nutritional value.

11:00 AM - Academic Session 3: Continuation of morning academic lessons.

11:50 AM - Group Lunch by Cohort



12:50 PM - Faith & Physical Fitness: Activities promoting spiritual and physical well-being.

2:00 PM - Skill Training Elective: IT Networking, Electronic Game Design, or Construction.

3:30 PM - Rites of Passage Activities: Weekly manhood training themes like respect, conflict resolution, and self-discipline.

4:30 PM - Faith & Physical Fitness: Activities promoting spiritual and physical well-being.

5:30 PM - Room Inspection & Drill

6:30 PM - Group Dinner and Reflection: Discussion about lessons learned and healthy eating.

7:30 PM - Study Time, Instructor Office Hours, Counseling Sessions: Time to complete assignments, get help from instructors, or enjoy one-on-one counseling.

9:00 PM - Evening Reflections: Led by Manhood Counselors on daily themes.

9:30 PM - Free Time/Preparation for Bed.

10:00 PM - Lights Out.

### **Weekend Schedule**

#### **Saturday**

5:00 AM - Wake Up & Faith Devotion

6:00 AM - Showers, Dress, Dorm room inspection by Manhood Counselors for cleanliness.

7:00 AM - Morning Drill: Military-style exercises focused on discipline.

8:00 AM - Breakfast and Health Education: Focus on a healthy diet and nutritional information.

9:00 AM - 12:00 PM: Farming Activity - Learning about agriculture, sustainable farming, and the importance of local produce for a healthy diet.

12:00 AM - 2:00 PM: Return to Dorms for Showers, Lunch, Midday Worship.

2:00 PM - 8:00 PM: Career Prep Field Trip - Related to exposing youth to colleges, vocational training, business leaders.

8:00 PM - 10:00 PM: Dinner, Fun Activity

10:00 PM - Free Time/Preparation for Bed.

11:00 PM - Lights Out.

### **Sunday**

5:00 AM - Wake Up & Faith Devotion

6:00 AM - Showers, Dress, Check In with Counselors about Sunday Plans

7:00 AM - Free Time

8:00 AM - Breakfast

9:00 AM - 7:00 PM: Parent Pickup Time. Optional stay for students wishing to remain on campus, with supervised free time or optional workshops.

7:00 PM - Group Dinner and Reflection: Discussion about lessons learned and healthy eating.

8:00 PM - Study Time, Counseling Sessions: Time to complete assignments or enjoy one-on-one counseling.

9:00 PM - Evening Reflections: Led by Manhood Counselors in preparation for the week ahead.

9:30 PM - Free Time/Preparation for Bed.

10:00 PM - Lights Out.

## POTENTIAL VENUE OPTIONS FOR SUMMER ACADEMY

Seeking a suitable college campus with dorms, located at least 30 minutes outside downtown Memphis, and with abundant green space.

- Southwestern University (Memphis, TN): Offers a scenic campus that is well-equipped for hosting summer camps, with a variety of comfortable housing options designed to foster a safe and engaging learning environment for students. Additionally, the university provides excellent facilities for vocational training, including state-of-the-art materials and equipment that support hands-on learning experiences in a variety of disciplines.
- Arkansas State University (Jonesboro, AR): Roughly an hour away from Memphis, ASU offers a large campus with diverse residence life options and green spaces.
- Union University (Jackson, TN): A private, Christian university located in Jackson, Tennessee. Union University offers a variety of residential options and is known for its beautiful campus and strong community life.
- Lane College (Jackson, TN): A historically black college located in Jackson. Lane College provides residential facilities for students and might offer accommodations suitable for summer programs.
- Bethel University (McKenzie, TN): Located less than an hour away from Jackson, TN. While primarily in McKenzie, it's accessible from areas between Cordova and Jackson. Bethel offers housing options and has a scenic campus.
- Freed-Hardeman University (Henderson, TN): A Christian university located between Jackson and Cordova. The campus has residential facilities and might host summer programs.

## BUDGET SUMMARY & JUSTIFICATIONS

### Personnel Costs: \$724,163

- Administrators (\$43,200): Compensates two administrators who oversee the program's overall operations, ensuring all activities are executed smoothly.
- Counselors (\$171,000): Funds ten overnight counselors who ensure student safety and provide guidance, contributing to a supportive learning environment.
- Academic Tutors (\$198,000): Pays for ten tutors who provide personalized academic support, helping students overcome educational hurdles.

- Skill Instructors (\$11,880): Covers the costs for six instructors who deliver specialized vocational training, enhancing students' skills relevant to future opportunities.
- Mental Health Therapists & Parenting Coaches (\$148,500): Supports five professionals who offer mental health support and parenting advice, fostering a supportive community.
- Military Drill Instructors (\$40,500): Compensates five instructors who instill discipline and leadership through physical activities.
- Fitness/Yoga Instructors (\$5,832): Funds two instructors focused on promoting physical well-being through fitness and yoga practices.
- HR Expenses (\$20,250): Covers recruitment, training, and other human resources activities crucial for maintaining a high-quality staff.

**Operational Costs: \$1,261,377.20**

- Uniforms (\$5,000): Provides uniforms for students, fostering a sense of unity and belonging.
- Program Development & Administration (\$90,000): Supports the groundwork required for conceptualizing and planning the program, including administrative operations.
- Food and Lodging (\$486,000): Ensures students are well-nourished and lodged comfortably, crucial for their well-being and learning.
- Media & PR (\$54,000): Enhances visibility and public awareness through media and PR efforts.
- Marketing, Advertising (\$157,500): Drives community engagement and participant recruitment through comprehensive marketing strategies.
- Technology Support (\$29,700): Maintains and supports technological resources vital for program operations.
- Insurance and Liability (\$1,800): Mitigates risks, protecting the program and its stakeholders.
- Student & Parent Technology and Licenses (\$54,000): Provides essential technological tools and software licenses for educational and communication purposes.
- Bus Rental for Weekend Activities (\$13,500): Facilitates transportation for educational field trips, enhancing learning experiences.
- Additional Travel, Meals Expenses (\$9,000): Covers miscellaneous costs related to program-related travel and meals.
- Program Supplies and Materials (\$13,500): Funds necessary educational materials and supplies.
- Contractual Services (\$18,000): Pays for essential outsourced services, including guest speakers and trainers.

- Equipment (\$45,000): Purchases or rents equipment needed for instructional and operational activities.
- Cultural and Educational Activities (\$13,500): Supports activities that enrich the learning experience, like museum visits.
- Miscellaneous (\$73,377.20): Set aside to address any unforeseen needs or challenges.

### **Total Budget Overview**

- Total Direct Costs: \$1,985,540.20 (reflecting adjustments for an 8-week program)
- Indirect Costs (10% of total direct costs): \$198,554.02 (covers overhead and administrative expenses)
- Grand Total: \$2,184,094.22 (total cost needed to conduct the summer academy)
- Cost per Student: Approximately \$21,840.94 (based on 100 students)

## SUMMER ACADEMY BUDGET BREAKDOWN

<b>Category</b>	<b>Description</b>	<b>Amount</b>
Personnel Costs	Salaries and wages for all staff members	\$724,163
Uniforms	Provision of uniforms for students	\$5,000
Program Development & Administration	Planning and administrative operations	\$90,000
Food and Lodging	Meals and accommodation for students	\$486,000
Media & PR	Public relations and media outreach	\$54,000
Marketing & Advertising	Marketing campaigns and student recruitment	\$157,500
Technology Support	Maintenance of IT infrastructure and website	\$29,700
Insurance and Liability	Risk mitigation and insurance coverage	\$1,800
Student & Parent Technology and Licenses	Technology and software licenses for students and parents	\$54,000
Bus Rental for Weekend Activities	Transportation for field trips and educational activities	\$13,500
Additional Travel, Meals Expenses	Miscellaneous expenses for travel and special meals	\$9,000
Program Supplies and Materials	Educational materials and supplies	\$13,500

Contractual Services	Outsourced services like guest speakers and trainers	\$18,000
Equipment	Instructional and operational equipment purchases or rentals	\$45,000
Cultural and Educational Activities	Cultural and educational events to enhance learning experiences	\$13,500
Miscellaneous	Unforeseen expenses	\$73,377.20
Indirect Costs	Overhead and administrative costs (10% of total direct costs)	\$198,554.02
Total Direct Costs	Sum of all direct expenses	\$1,985,540.20
Grand Total	Overall budget needed	\$2,184,094.22
Cost per Student	Average investment required per participant	\$21,840.94

## **STEM4US! CURRENT LEADERSHIP**

- **STEM4US!** is managed by a team of dedicated professionals and volunteers. Attorney Talib Ibn Karim is the executive director of **STEM4US!**. A lawyer, engineer, and writer, he also co-founded Abe Legal, a software company helping people of color provide and access high-quality legal services. Talib has over 20 years of workforce development, software development, and advocacy experience. A former Chief of Counsel for a Member of Congress, Talib is also the son of Dr. Talib Karim Muhammad.
- David Owens is the current chairman of the board of directors. He is President and Energy Consultant at Da'VAS, LLC. Previously, David served as Executive Vice President of the Edison Electric Institute (EEI), one of the largest trade associations in the world.

## **STEM4US! PAST PROGRAMMING FOR THE TARGET POPULATION/COMMUNITY**

- **STEM4US!** has a track record, of more than a decade, for successfully implementing actionable programming targeting at-risk youth, their parents, and educators.
- Over the last four years, **STEM4US!** has hosted in-person and virtual hackathons and other cyber-related events which have been attended by over 1000 students, parents, and professionals from places such as Memphis, TN; Mississippi; Washington, DC; Maryland; and Virginia. In addition, **STEM4US!** has supported STEM institutions and educators, benefitting as many as 2 million students.
- In 2020, **STEM4US!** hosted Cyber Ed Festival, where students, parents, and educators could network and get resources during the academic year. Moreover, they demonstrated further wrap around capabilities beyond the academic year by hosting a Summit to Save Our Youth: Innovative Ways to Engage and Keep Youth Safe this Summer & Beyond.



- In 2021, **STEM4US!** held "The Ballot or the byte," a conversation centered around the police brutality Breonna Taylor, George Floyd, and Jacob Blake faced.
- March 2022, **STEM4US!** State of Cyber Diversity - Celebrating Women's History Month: This event addressed the state of diversity within the cyber and tech sectors, particularly focusing on women's roles and contributions, in alignment with Women's History Month.
- **STEM4US!** 2022 Spring Hackathon: They organized a Spring Hackathon event showcased in a demo reel, which highlights the involvement and achievements of the participants.
- In 2022, **STEM4US!** Hosted a Cyber Education Advocacy Event: They focused on the importance of cyber education for national safety and prosperity, underlining the significance of cybersecurity in current educational curricula.
- On July 16, 2022, **STEM4US!** held a summit with government professionals to brainstorm on new ways to keep youth safe from violence by engaging them around cyber and other STEM careers.
- August 2022, **STEM4US!** Memphis Town Hall on Ending Youth Violence. This event was hosted at the National Civil Rights Museum in Memphis. The organization aimed to engage the local community, including students, educators, and professionals, in discussions and activities that highlight the importance of STEM fields as a pathway out of violence.
- 2023 **STEM4US!** & Kappa Hackathon: This event took place on June 3-4, 2023, and was designed to engage participants in activities related to STEM and hacking to foster learning and development in these areas.
- December 2023 **STEM4US!** Webinar: They hosted a webinar focused on "Innovative Solutions to Carjacking, Youth Violence in the DC Region", aiming to address and find solutions to pressing social issues through dialogue and collaboration.
- February 17, 2024, **STEM4US!** hosted a Black History Month Summit on Innovative Solutions to Youth Violence in Memphis. The event attracted over

30 high caliber experts offering unique solutions to engaging youth through cyber and other STEM related vocational training.

## **CONCLUSION AND CALL TO ACTION**

The Dr. Talib Karim Muhammad Memphis STEM & Leadership Academy represents a critical investment in the future of Memphis' youth. It's more than an educational program; it is a comprehensive development platform that addresses the multifaceted needs of young boys in Memphis. By providing a safe environment, targeted academic support, discipline and manhood training, vocational and entrepreneurship education, and family engagement, the program aims to empower participants to both reduce youth violence and lay the foundation for participants to become contributing, skilled members of the workforce and innovative business owners. Your investment in this initiative can dramatically improve the safety and security of Memphis as well as drive prosperity and growth of Memphis, as an engine of the Midsouth.