



.....  
**in AFRICA**

# **STEAM EDUCATION**

## **Tertiary Challenge**

*"Creating the African Reward"*



# INTRODUCTION



## We are Destination Imagination (DI) in Africa

DI in Africa is dedicated to revolutionizing education by bridging the gap between academia and industry.

- **The Challenge**

There's a growing disconnect between university outcomes and industry needs.

- **Why It Matters**

To shed light on a pressing issue in education.

To showcase our solution for addressing the university-industry disconnect.

The urgent need to equip graduates with practical skills.

# The Challenge

*Bridging the Gap: Tertiary Graduates & the Workforce*

## Growing Concern

- Many tertiary graduates struggle with job readiness.
- Employers question the practicality of academic qualifications.

## AI's Impact

- Rapid advancements in AI redefine the job landscape.
- Graduates need adaptive skills to navigate the future.

## Lifelong Learning

- A shifting job market demands lifelong learning.
- Problem-solving skills become indispensable.



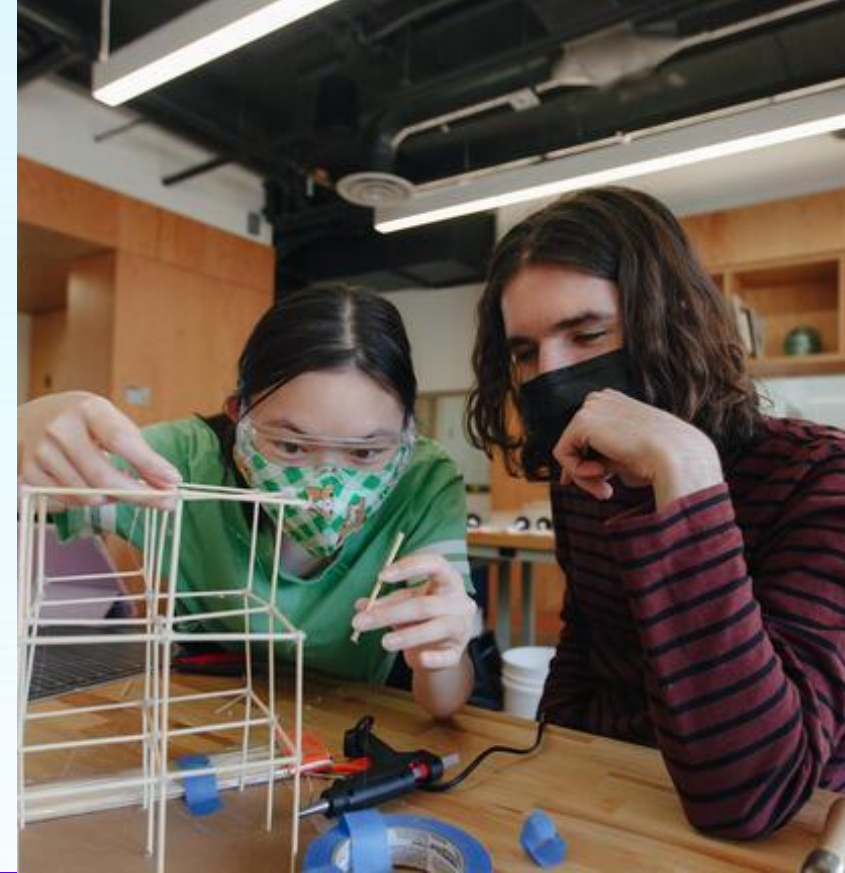
# Solution - Destination Imagination in Africa

## Fostering Skills and Attitudes

- Skills for Success
  - Critical thinking, problem-solving, and creativity.
  - Building resilience, adaptability, and a lifelong learning mindset.

## Global Collaborative Projects

- Learning Beyond Borders
  - Engaging in projects with a global reach.
  - Fostering teamwork, diversity, and cross-cultural collaboration.



## Project Based Learning

## Learning by Doing

- Applying knowledge to real challenges.
- Culminating events to showcase skills and innovation.

# Our University Partnerships

This initiative aims to promote interdisciplinary collaboration and holistic skill development at the university level, integrating humanities and social sciences into STEAM topics to stimulate advanced problem-solving and critical thinking, with a target of a 25% increase in solution diversity at the annual event.



## Creating Opportunities for Graduates

### Expanding Horizons

- Partnering with tertiary institutions for impactful learning experiences.
- Opportunities to enhance CVs and apply learned skills beyond the program.



## Developing Critical Thinking & Problem Solving Skills

### Skills for Tomorrow's Challenges

- Encouraging higher-order thinking, research, and synthesis.
- Fostering critical thinking and problem-solving abilities in students.



# Tertiary Institutions that have Participated



**Below is a list of institutions that have gone through our DI program over the past 6 years**

1. The Millennium University College (Pakistan)
2. Sir Syed University of Engineering and Technology (Pakistan)
3. FAST National University of Computer and Emerging Sciences (Pakistan)
4. NED University of Engineering & Technology (Pakistan)
5. James Madison University (Virginia)
6. Qatar University (Qatar)
7. Ryerson University (Ontario)
8. University of Texas in Dallas (Texas)
9. Miami University (Florida)
10. Abilene Christian University (Texas)





# 85%

of employers believe that cross-disciplinary skills and innovative thinking are more important than a candidate's undergraduate major when making hiring decisions, highlighting the growing demand for the skills our program aims to cultivate."

## PROGRAM OBJECTIVES

# Key Objectives

This program promotes cross-disciplinary integration, complex problem-solving, and critical thinking while enhancing intrapersonal and collaboration skills. It also focuses on developing learners' perseverance, character, motivation, and innovation capabilities through project-driven challenges.

- Cross-Disciplinary Integration
- Igniting Complex Problem Solving
- Building Resilience and Perseverance
- Fostering Personal Motivation
- Unlocking Innovation and Entrepreneurial Mindsets

# Program Benefits



- + Increased Youth Employment Potential**

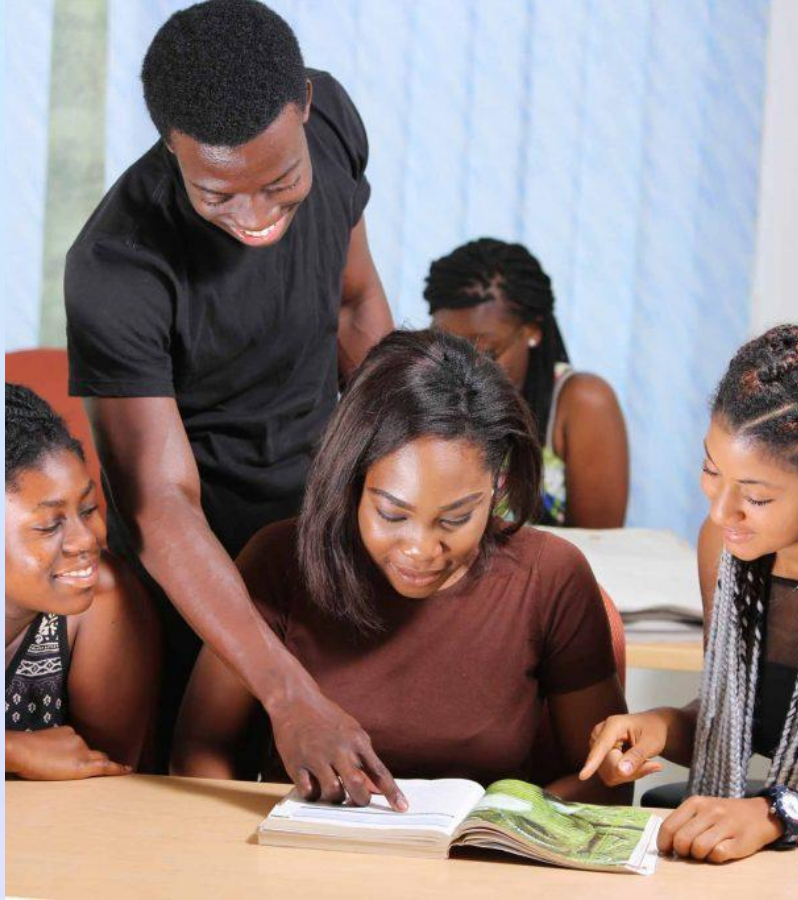
Youth engaged in the program experience a 30% increase in employability, aligning them better with job market demands.
- + Supporting Active Citizenship**

Graduates exhibit a 40% increase in community involvement and a deeper understanding of their roles as active citizens.
- + Promoting Lifelong Learning**

Participants continue their education, showing a commitment to lifelong learning and contributing to higher education retention.
- + Igniting Hope and Global Connections**

Our program instills hope, with students feeling more connected to a global community of learners.
- + Transference of Durable Skills**

Students will gain a 50% improvement in applying acquired skills not only in academic pursuits but also in personal life and career endeavors



# Theory of Change

## *Preparing Students for Global Success*

01.

### **Exposure to the Global Stage**

Destination Imagination in Africa cultivates students to become active, globally-minded adults by providing exposure to international perspectives and challenges.

02.

### **Integration of Up-to-Date Pedagogy**

We integrate modern pedagogical approaches, utilizing a project-based community development plan that complements traditional education systems, ensuring students are prepared for success in a dynamic global economy.

03.

### **Empowering through Project-Based Learning**

As a leading education non-profit, Destination Imagination, Inc. develops project-based learning programs that merge STEAM disciplines, empowering students to transform their ideas into valuable, real-world skills.

04.

### **Impactful Curriculum Support**

In partnership with schools and tertiary institutions, Destination Imagination's content enhances core curricula, ensuring students are well-prepared for future academic and career challenges.



# ■ Pedagogy Elements

Destination Imagination's pedagogy encourages independent innovation through elements like no interference and rapid ideation, fostering resourcefulness and creativity while emphasizing structured problem-solving approaches. This approach empowers learners to explore beyond their limitations and promotes authentic self-expression in collaborative solutions.



**Self-Learning**



**Authentic  
Self-Expression**



**Rapid Ideation &  
Implementation**



**Resource  
Awareness**



**Clarifying  
Questions**



## Program Overview

*STEAM Education Challenge for Tertiary Level*

### **Challenge Duration**

A 10-week intensive program designed to shape the future leaders of tomorrow.

### **Sub-Saharan Africa Tournament**

The program culminates in a highly anticipated Sub-Saharan Africa tournament where teams showcase their innovative solutions.



# Rollout Plan

*Team Tracking Progress*



## Initiating

### Recognize

Team formation and project identification to begin the journey.

## Planning

### Imagine

Generating ideas, setting goals, and creating a project plan and timeline.

## Executing

### Collaborate & Initiate

Experimenting with potential solutions and working collaboratively.

## Monitoring

### Assess

Tracking progress, ensuring compliance with challenge requirements, and refining solutions.

## Closing

### Evaluating & Celebrating

Finalizing the project, presenting to an audience, reflecting on learning, and celebrating success.



# Project Outcomes



## Enrollment and Mentorship

- Registration milestones (MOU signing and team enrollment) underscore financial commitment and team dedication.
- Mentorship is vital for team support, but potential risks such as connectivity issues and device availability must be considered.



## Preparation and Documentation

- Pre-survey and team solution development highlight early groundwork and creativity.
- Crucial focus on teamwork, commitment, workspace availability, and acknowledging potential interferences.



## Tournament and Feedback

- Registering for the tournament is a significant step, hinging on travel ability and meeting deadlines.
- Post-survey and tournament attendance are final phases for addressing potential technical barriers.

# Participation Costs

✓ *Investing in Success*

**\$120**  
per student

## LMS Learner Profile & Tracking

Includes access to the STEAM Education Challenge for Tertiary Level, student access to online training, and 20 hours of mentorship (1 hour weekly).

**\$130**  
per student

## Supervisors, M & E Officer

Involves a dedicated team to coordinate sessions and share monthly Monitoring and Evaluation (M & E) reports.

**\$120**  
per student

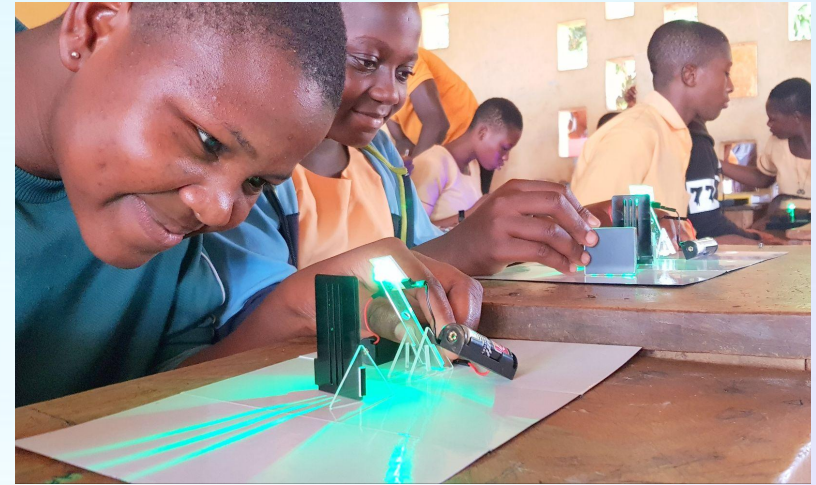
## Admin Fee

Supports sustainable materials for the STEAM Education Challenge, and fuels marketing efforts to expand the university's global impact and partnerships.

**\$80**  
per student

## Tournament

Includes assessment costs



- ★ *Costs listed per student for 8 months.*
- ★ *Transportation, accommodation, and food beyond the tournament managed by the institution.*

# Testimonials

---



**Amogelang Simane**

"I came into DI with the objective of building Gizmos, who would have thought it would be a life changing experience. Gradually it become more than just challenges but personal growth. DI opened up my mind to a whole new way of thinking."



**Angela Kaelo**

"I really had a fantastic journey participating in DI for it taught me a lot. like you reap what you sow and I and my teammates did reap August results from the hard work we exhibited even though it was challenging for us. We made it, thats what matters most."



**Lefa Disho**

"My experience was on of excitement and challenge. Being part of the DI Program made me a different person because of it. I become more cooperative and innovate."



**Contact info**

## **Join the Journey**

Tournament Date : *January 10, 2024*

**Cost Per Person: \$450.00**

### **Awards**

Certificates for All Participants and Medals  
for Highest Ranking Teams

### **Institution's Recognition**

Your institution will be featured on the DI in  
Africa website and social media.

**Sally Kimangu - Executive Director**

**Email: [sally@di4africa.org](mailto:sally@di4africa.org)**

Location

Name Here

**THANK YOU**