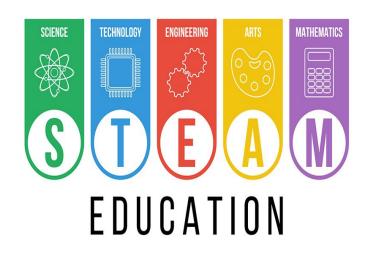
Encouraging Girls, Women and People of BAME Descent into STEAM Education: Breaking Barriers & Empowering Minorities

Keynote Address by Dr Emefa J.A. Takyi-Amoako Catholic Institute of Business and Technology, Accra, Ghana 19/01/2024

INTRODUCTION

What is STEAM?



STEM vs STEAM

IMPORTANCE OF STEAM

STEAM: Driving societal progress

Medical breakthroughs, sustainable energy, AI, climate change solutions



THE CURRENT LANDSCAPE

- Underrepresentation of girls, women and BAME individuals in STEM
- Societal expectations, cultural stereotypes, systemic biases

THE CURRENT LANDSCAPE

- 1 in 3 researchers in science globally is a woman.
- In Africa, 30% of science professionals are women and female enrolment in Science,
 Technology, Engineering and Mathematics (STEAM) courses is rising.
- Yet women and girls are still underrepresented.
- Globally, only 12% of the members of science academies are women and
- they comprise only a quarter (28%) of tertiary graduates in engineering and
- 40% of computer sciences graduates.
- In Africa, the share of women fellows of the African Academy of Sciences is only 17%.

THE CURRENT LANDSCAPE

Ghana follows this trend:

- Only 14% of all students attending university are female and
- Women made up 26% of PhD graduates in 2018.
- This gender disparity is reflected in the leadership of the Ghana Academy of Arts and Sciences:
- only 3 women Presidents out of 20 in the 52-year history of the Academy. More needs to be done to bridge the country's gender gap in science.

UNTAPPED POTENTIAL

- Diversity as a catalyst for innovation
- Different perspectives, ideas, and approaches



EMPOWERING THROUGH EDUCATION

- Dismantling barriers in education
- Inclusive and accessible STEAM education
- Fostering curiosity, experimentation, and mentorship programs



CHANGING THE NARRATIVE

- Importance of representation
- Celebrating achievements of women and BAME individuals in STEM
- Showcasing diverse role models



CHANGING THE NARRATIVE

• A Vignette



CREATING INCLUSIVE SPACES

- Beyond education: Addressing workplace environment
- Fostering inclusive cultures
- Implementing diversity, equity, and inclusion policies
- Promoting diversity in leadership positions



SENSE OF BELONGING

- Individuals feeling valued with equal opportunities
- Diversity in leadership as a vital example
- Creating a sense of belonging for all



CONCLUSION

- Encouraging diversity is a collective responsibility
- Shift in mindset, policies, and societal expectations
- Challenging stereotypes, providing equal opportunities, and celebrating diversity





FUTURE COMMITMENT

- Building a world where everyone feels empowered to pursue STEM
- Creating a just and equitable society Unlocking human ingenuity for the benefit of all



THANK YOU

Thank you for your time and commitment to breaking barriers in STEM.