

# Building the Next Generation of Astronomers in Developing Nations Through Education and Synthetization Out-reach

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## Abstract

With the eminent advancement in science and technology especially in the area of astronomy and space sciences, most developing countries are being left out or are non-participatory in spite of the benefits of the improvement of quality of life and the advancement of research in better understanding our planet and universe. With specific education in astronomy and related fields missing from the educational curricula in most African countries. Outreach programs, non-conventional and creative methods of communicating the importance of the science of astronomy to the masses stands out in sparking the interest of not just the young people but the institutions to adopt and welcome the science of astronomy in schools. Outreach based on educating the young people from the ages of 4 - 21 will be helpful in introducing astronomy to them and sparking their interest in astronomy, to give a fair chance to that child who dreams of having a career in this field but their dreams are cut short due to lack of education and access to educational resources in astronomy.

This is a solution that brings astronomy education to the classroom, utilizing and improvising with available resources targeting children and young adults in developing countries, addressing the issues of inclusion, diversity, and equitable access to education in astronomy. Thereby building a mass of enthusiast and future researchers who will advance the science of astronomy for the development of developing nations.

**Keywords:** Astronomy, Outreach, Education, Diversity, Inclusion, Development



## Project Methodology

- Our vision through the aerospace baby project is to break the stereotype surrounding the aerospace industry in Cameroon/Africa by building a resilient and sustainable community of individuals who are passionate about the space industry catching them while they are still young.
- The aerospace baby project aims to massively educate and orientate kids who are considering an education/career in a STEM-related field about the aerospace industry by:
  - Regular outreach programs to schools
  - Short Space Boot-Camps for kids
  - Webinars connecting industry experts to young people.



## Results

- Currently we have been able to reach at least 1000 children and young people through our outreach programs and events.
- There is more engagement of youths in amateur astronomy, in astronomy clubs in universities where they participate in asteroid search campaigns and carry out sky watch events.
- More Students get engaged through professional development opportunities like the Pan African School for Emerging Astronomers, African Astronomical Society, and the Astronomy Club of Cameroon
- Through innovative methods we are able to increase the interest in students by providing some hand-on space science games and projects.



## Conclusion

“The impact of early engagement can have a hugely positive impact on wider academic attainment, motivating and inspiring both children and their families, by helping them to see a future to which they can aspire and which feels achievable.”

Writes Robert Halfon, chair of the Education Select Committee in the UK.

**In conclusion, in order to build the next generation of astronomers in Africa, there is the need to start from children, as they are the future stakeholders in the industry.**

**Promoting equitable and inclusive education in astronomy for all..**

## Acknowledgements

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