



## **African research and education requirements**

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# Workshop group

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  - Oluwaseye Onikeku – Pan-African University (Kenya)
  - Solomon Adomako – University of Bologna (Italy)
  - Chinedu Ekechukwu – University Centre Weston (UK)
  - Dyna Gakii Kaaria- University of Nairobi (Kenya)
  - Murray Metcalfe - University of Toronto (Canada)
  - Yunus Ballim - Sol Plaatje University and Wits (South Africa)
  - Arnold Ogutu - University of Nairobi (Kenya)
  - Williams Kehinde Kupolati - Tshwane University of Technology (South Africa)
  - Noah Tilley Otieno - Kenya Railways Training Institute (Kenya)
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  - Alex Ndibwami – Formerly at Uganda Martyrs University (Uganda)
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# Problem Statement

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Why does Africa, a developing continent with vast natural resources, have ineffective educational and research outlook?



# Introduction

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- Africans make up 12.5 % of the world's population
- Africa has less than 3.6 % output in global research
- Africa has the highest education exclusion rate
- Yet, it is one of the major continents that faces tough challenges that can be solved through robust and efficient research

*Research is key to the development of any nation and a significant determinant of health and productivity (Nass et. Al 2009)*

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# Problems and challenges

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- Funding
  - Institutional culture
  - Dysfuntionality of systems
  - Resource allocation
    - Teaching, Learning and Assessment methods
    - Staff-to-student ratio
    - Commitment levels
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# Responsibilities

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- Government
    - Regulatory Agencies
    - Engineering Councils
  - University Community
  - Industry
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# Requirements

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- What is required to change current shortcomings?
  - Harmonize the framework of the curriculum
  - Performance checks and actions taken
  - Moral will
  - What are the pre-conditions?
  - Accountability
  - Proper funding
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# Key Strategies

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- How can changes be achieved?
    - Public discussion among university staff
    - Work-based learning
    - Interdisciplinarity
    - Industrial secondment
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# Pains and gains

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- What will be painful if change is implemented?
    - Job losses, Resistance to change by staff and students
  - What will be the cost?/price to pay?
    - Imposed trainings and upskilling
    - Writing retreats for researchers
    - Intra-Africa academic mobility
  - What will be the gains on the short, medium, long range?
    - More industry collaboration, fundings, better educated students and research output
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# Major players

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- Which professional groups/institutions/individuals will have to make the first step?
  - Government
    - Regulatory Agencies
    - Engineering Councils
  - University Community
  - Industry
  - Is there a plan B, if these players do not take initiative?
    - How useful can the Association of African Universities (AAU) be?
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# Summary and conclusion

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- **Summary**
  - Government should prioritise funding in research and education
  - State institutions should put in place control checks
  - All stakeholders should take ownership
  - **Conclusion**
  - Times are changing, thus needs and roles should.
  - Is research and education going to change?
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THANK YOU!!!

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