
Keynote on Unify Community, University, Industry and Public Service for Learning, Teaching and Research Excellence in Africa

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- Examples of African Journals: AJSTID, JCISE & Ee-JRIF
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Inspiration

Africans All must do research with action, and take action with research

- Make and enable the future with research
- The overall goal of research is to make community impact
- Address the challenge of research output and outcome with patents and commercialization
- Treat research is hard work as fun
Inspiration

- At the heart of all research, is an endeavour to find out, to investigate, confirm, probe, test, see or view, measure, correlate, compare, evaluate, find meaning, gain understanding, or to discover new emerging properties. (Bless, Higson & Kagee (2006)

- Africa also needs to draw from the life savior Ubuntu philosophy to enforce social innovation to generate socially anchored new green, smart and healthy development
Inspiration

- From Africa there is Ubuntu
- Ubuntu also promotes: I am because you are—. many is one, one is many. there is an "I" in you and you in "I". Diversity is not negative, it can be an asset. it should not take away our similarity and oneness. Let us learn with humility, honesty, sincerity and integrity to appreciate diversity in order to celebrate our one humanity with self-less moral and emotional intelligence and not the pursuit of narrow self-interest.

Any variations such as colour, language, religion, caste, ethnicity, gender and all do not change our humanity or diminish it. if we know how to appreciate difference by not denying our human similarity. we can create a humane, peaceful and civilised world with values of care and share and not to live in the current capitalist global world run by pricing everything and valuing nothing. A dog or horse or any animal can be black or white, still a dog or horse, donkey and all. a human being can be brown, black or white, still human. colour cannot change the human gene or character. Those that created the crime using colour to buy and sell humans as goods and things should learn the big tragic mistake they made and let one human family occupy peacefully our world to keep it going in the eternal river of time to create the post-covid world order.
Inspiration

- African identity continues to be subtracted by a degrading psychic dislocation
- Africans using external colonial presence by defining themselves with division
  - Like Lusophone
  - Francophone
  - Anglo phone
  - Ethnic phone
  - Language phone
  - Religion phone
  - Gender phone
  - And so on
- Africa is not a phone
Inspiration

- Do research with empathy and feel compassion
- Do research with love and feel spirited energy
- Do research with hope and feel positive
- Know about research with humor and feel fun
- Know innovation to further research without bias and with positive spirit
- Don't fail to do research for innovation at all to address the current challenges Africa is in.”
Inspiration

- The tragedy of the world is that those who have imagination have but slight experience and those who are experienced have feeble imaginations. Fools act on imagination without knowledge: pedants act on knowledge without imagination. The task of a university is to weld together imagination, knowledge and experience to build and create experienced learners with knowledge and imagination hybridity and synergy.
Inspiration

The active engagement and support by Governments, industries, universities and other actors in and with the community’s efforts to create and transform existing knowledge into innovation by identifying and applying the knowledge converted into innovations to address social and environmental challenges at the grassroots level for the provision of solutions to create zero poverty, no unemployment and inequality.
Africa Must Choose to Do Problem Solving Research

- Work Integrated based Research
- Context specific based Research
- Project Based Research
- Problem based research
- Research output from all of them
- The research output should create spin-outs and real ventures
Building Research Output with Impact

- Quadruple helix collaboration by focusing research to create knowledge on real life world problems
- Participatory multi-stakeholder research engagement
- Reality, context specific innovative research output a priority
- Support to do research output for venture start-ups for graduates
- Governments support through constructive policy, universities by providing top research to identify the knowledge that exists at the community level and industry by helping in the process of conversion of the community knowledge into innovation, and the community is empowered to use the knowledge inside to create innovation and wealth!
- Inter university collaboration locally, regionally and Africa wide including globally based on the principle of mutual benefit. Not African losing and others gaining the risk inherited from the colonialism and neo-colonialism.
Research Process Innovation Pathway

- Framing the research innovation process
- From start to completion
- Knowing what to do and not do
- Doing what is known clearly
- Creating high quality output
- Publishing or producing patent
- Creating a new venture
- Research output that includes all stakeholders to produce innovative and inventive practice performing and transforming researchers

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Unify Disciplines by Removing Silos

- All fields must be included: Social sciences and humanities, medical sciences, Engineering, STEM, KLICS, mathematics, physical and life sciences.
- Universities should have Licensing & Ventures Teams
- To evaluate the output potential of all research work
- Researchers to do partnerships with industry
- Promote entrepreneurial driven ventures to do start up incubation
- University support with IP and legal, licensing and all relevant support of the research output
How to Support Research Output

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Paradigm Shift needed

- The African science, technology innovation system path should also change the mind-set of all to be game-changers and change makers. What to produce and where to produce and how to add value with innovation and entrepreneurship should be the priority of life for all to transform Africa. A new innovative approach to value and use all the resources to create production by applying high technology and innovation is long over due. Let all join and seize the moment to innovate innovative Africa, not the donor, loan, debt dependent Africa from now on!
Research Lab with Technology

- Technology in all fields and disciplines is the requirement
- Engaging industry in the university to educate students to serve the community
- Research output to leverage with both university and industry
- To make research output as useful products and services for the benefit of the community
Research by Inventors, creators and entrepreneur graduates

- Create graduates that invent
- That create
- That innovate
- That are entrepreneurial
- That are not job seekers
- That are job creators
- That build the wellbeing of communities
Research Optimal Value Creation

- How to re-design and restructure the Research value chain
- The way to do University-Industry-Community research
- The way to evaluate the output
- The way to reach all sectors
- The way to solve the current major problems
Digital Technology Impact on How to Do research

- Time to use socially and environmentally secure digital technology to solve social and environmental Problems
- Use Digital Technology to create a new validation criteria
- Not only commerce, market and economics but the holistic inclusion of all other variables
- Health
- Education
- Social solidarity & Nature safety
Research Excellence Achievement

- **Research** should be scientifically done in order to solve a problem. Research and knowledge can be synonymous.
- **Research output** should generate findings that should have tangible quality and impact on society.
- **Research transfer** is the purposeful packaging and communication of the findings and output to provide community service.
- **Research utilisation** is the application of research-based knowledge in practice and policy with tangible service provision.
- Research is knowledge in practice not theory.
- A new paradigm shift to provide an improvement, not just a different explanation by undertaking research excellence.
Going for Research Beyond Personal Gain

- Research output should not only be done to attain personal gain.
- Achieving widespread, sustainable, positive impact on society is critically important.
- Academic innovation excellence for universities by including industry.
- Motivation of all peers to learn research collaboration to achieve high quality.
- Creating joint reward to universities and industries to collaborative inter-university and industry researchers.
- Applying and using Centers of excellence, Research chairs, niche areas and flagship research South African universities with DSI/NRF support are developing that can be an example for the rest of Africa.
Knowledge Exchange Framework
Rating to Encourage Researchers

- Recognition with research awards and rewards for the excellence in research knowledge output
- Provision of rating organizations whose researchers can gain by converting research output in creating sustainable development by increasing the African Green Future Index,
- Encourage researchers to achieve higher ratings in the KEF.
Knowledge Exchange Framework for Competence Building

- Embedding a total invention, innovation, learning culture
- Transforming Africa through knowledge, learning, innovation, competence building systems
- Establishing a Pan African innovation system
- By learning and building from the past inventions innovation using all the sciences and engineering by Africans for Africa.
- Using the rich values of Africa (e.g. Ubuntu and MA 'at) to use all the sciences and engineering for innovation without transgressing social and ecological health
- Building a new learning and innovation integrated STEM driven trajectory by making AUDP/NEPAD very active in African first affirming transformation and innovation system building
Research Excellence Framework rating

- Research Excellence Framework rating
- Achievement database and website
- In the **Research Excellence Framework** (REF), the system for assessing the quality of research,
- social and natural science research excellence can be a major plus point in evaluating an organization.
- Impact is graded by assigning a star rating to research, on an ascending scale. All the social, human science, technology, engineering and mathematics disciplines should achieve many high star REF ratings
CURRENT SCENARIO
Growth indeterminate
Technology transfer- external
Services- external
Not integrated
Dependence on low value sectors only

DEVELOPMENTAL OUTCOME
Unified system of Innovation
Integrated & Networked
Growth determinate
Technological learning
Inclusive development
Poverty reduction
Dependence on both high value and low value sectors

AGRICULTURE
(LOW TECHNOLOGY)

MANUFACTURING

SERVICES

Transformation

Inclusive
Indigenous knowledge
Bottom-up
People centred
Social capital

Radical
Incremental
Revolutionary
Importance of R & D

AGRICULTURE
(HIGH TECHNOLOGY)
Unify Community, University, Industry and Public Service in Africa
Inclusion of Indigenous Knowledge in the Education System

- IK inclusion in the education System urgent
- New text book designs urgent
- Real African books series critical: African World Press is keen to start the series
- AU and all those who claim pan-Africanism should work together with trust to build the African Union Education Commission (AUEC) to guide systematically the whole education system
- To transform the whole education system in Africa as a whole
- Bring the African STEM back and use it to build deeper the education curriculum with the African knowledge heritage to
- Talk less, do more. Let us move forwards and upwards to make Africa achieve full agency, dignity, pride and independence.
- Reimagine Africa as an innovator now not tomorrow!
African-Centred Innovation System

- Africa needs to construct an integrated, networked and unified sustainable social open innovation system path by coming together rather than by going alone facing the prisoners’ dilemma being caught within the boundaries of each of the 55 states. A new social innovative approach to handle the rich resources and how to create both production applying high technology and innovation and creating consumption by making the African production to consumption value chain is much needed to address now more than at any time as the global value chain is changing dramatically with the 4th Industrial Revolution and the climate change, Covid -19 difficult crises time
African centered Innovation system
With KLICS

Human and nature wellbeing
Agriculture
Food security
Human and social capital
Governance System with Ubuntu
Institutions
Alternative energy
www.ansole.com

Social, spatial, natural economic transformation

IK in the African innovation System.
African Union Education Commission Essential

- To create an African unity for Reaissance project identity
- To promote smart growth based on unified knowledge, learning and innovation
- Inclusive growth that combines the knowledge of the community with knowledge from the academy
- Sustainable growth that utilises natural resources by combining the human, natural and spiritual worlds with moral intelligence!
- African Union Education Commission must be established to create the African free education system
Changing the African Education Curriculum with IK

- IK from kindergarten to research university must be included
- IK continuously from primary, secondary, higher education and beyond in peoples work lives
- Expanding education into community, society
- Expanding education into business and industry
- Linking education with the global flows of knowledge, higher education and research
- Integrated university system: from further education colleges, polytechnics, TVETS, vocational and skilled training to developmental, specialized, entrepreneurial and research universities
- Create the inventive, venturesome and the innovative graduate! The job/employment creator not just the employment or job seeker?
- Every African to become all time learner and creator with the knowledge, learning, innovation and competence system (KLICs) throughout ones life...
African Journal of Science, Technology, Innovation and Development (AJSTID)

- It is a journal to promote African unity of knowledge research with IK
- It has now run 14 years
- It should be used in the transformation of the African education system
- There are over 70% of researchers from Africa in every issue
- It is linked to high end research networks like ICAT, Globelics, iN4IN, Africalics, Indialics, Cicalics, NESglobal’s knowledge Exchange (http://www.nesglobal.org/eejrif4/index.php?journal=admin)
- https://sarchi.org/jcise/
- See https://twitter.com/ajstid1
- http://www.tandfonline.com/toc/rajs20/current
The strategic priority of the journal:
- Social innovation for ensuring inclusive development;
- Social entrepreneurship for eradicating poverty, unemployment and inequality;
- Transformation from linear stages of economic growth to evolutionary economics;
- Wealth creation with social and environmental benefits and gains;
- Utilization of frugal innovation for ensuring economic development;
- Utilizations of creativity, innovation to covert IK with STEM innovation (https://sarchi.org/jcise/)

Another Journal of the Ethiopian Electronic Journal For Research and Innovation Foresight (Ee-JRIF) (https://sarchi.org/?tag=ee-jrif)

All together
Concluding Remarks

- Develop or identify “common core” educational curricula for kindergarten, elementary school, high school, college and universities.
- Harmonize and monitor the implementation of “common core” curriculum across member state educational institutes in all schools to tertiary university.
- Develop and monitor the implementation of “Mama Africa” Curriculum in all member states in all school:
  - How our ancestors lived peacefully before colonialism (Mama Africa 101)
  - How Africans dealt with colonialism and survived (Mama Africa 102)
  - The birth of Pan-Africans; How Africans live now in the post-colonial period (Mama Africa 103)
  - The African unity delay resolution the future [Mama Africa 104]
Concluding Remarks

- Standardize qualification and accreditation of African higher educational institute—do not outsource it!
- Develop an All Africa wide African focused curriculum on African history, economy, IK, STEM and culture
- Create awareness on principles of African Union (Pan-Africa) and create self-confident, responsible and accountable generation for Africa to stop talking unity and promoting conflict, division and corruption
- In-light African young generation with the latest development in scientific research in different areas, and of the political, cultural, socioeconomic and ecological changes that is on-going in Africa
Concluding Remarks

- Educate African children of the new challenges faced by Africa including questions of African unity, Pan Africanism, regional integration, education and culture, youth, gender issues, health, cultural diversity, creativity, arts, culture and development, intercultural dialogue within Africa, peace and environment, climate change, urbanization, scientific research and innovation, health care, sustainable development, good governance, South-South cooperation, relationship with African Diaspora and IK and STEM education etc.

- Let us all petition to get the AUEC or P-AEC to be approved by AU making AUEC or P-AEC to work in line with the AU social policy framework and in partnership with African nation’s education ministers and academic institutes across Africa to strengthen and develop continent-wide core curriculum and accreditation parameters for African. By working with experts throughout Africa, P-AEC pools Africa’s subject matter expertise in education to develop “Mama African Curriculum and set of parameters to accredit African professionals by AU for good without external interferences.
Concluding Remarks

- Africans must treat one another as one human family
- Practicing Ubuntu truly
- Building the Osiris African University with Ubuntu value really
- (https://sarchi.org/?p=1659)
- https://sarchi.org/?p=1638
- https://sarchi.org/?p=1641
- https://sarchi.org/?p=1645
- https://sarchi.org/?p=1638
Concluding Remarks
Finally

- Asante Sana
- Amesegnalehu
- Inkosi
- Kea leboga
- Ngiya bonga
- Thank you