



DIFFERENTIATE

Lancaster
University



IAU PROGRAMME: SETS: STIMULATING ENTREPRENEURIAL THINKING FOR SCIENTISTS AND STUDENTS

Dr AKANIMO ODON,
AFRICA STRATEGY ADVISER &
PROJECT MANAGER

Background of SETS

- Lancaster University co-designed, co-developed and have co-delivered two multi-organizational projects with African partners:
- (i) RECIRCULATE – www.recirculate.global (7 Million Pound Capacity Building Project with five African organizational partners from Nigeria, Ghana, Malawi, Kenya and Botswana)
- (ii) ACTUATE – www.actuate.global (700,000 Pound Waste to Energy Demonstrator Plant Development Project with over 10 organizational partners from Nigeria and Ghana).
- SETS is an integrated research project of WP1.
 - Launched in CSIR-FRI Ghana and delivered in partnership with African partners

Background of SETS

- Then Lancaster University won a British Council funding under the Digital Universities Africa programme to develop SETS further.
- In partnership with University of Benin and Igbinedion University Nigeria, Lancaster University Ghana, Kenyatta University Kenya and CSIR Ghana
- Then we won the IAU Project DIFFERENTIATE and afterwards won another Community Grant Project called PARTICIPATE PLUS

What informed DIFFERENTIATE?

- There is ideological gap between academic and industry.....
 - Academics and scientists....
 - “Publish or perish”.
 - Industry
 - “unable to understand the technical terms and theories of scientists”
- But;
 - There seems to be greater opportunities for scientists and academics to be entrepreneurially minded because they have;
 - the resources.....students’ project works, publications
 - Collaborators.....students, private sector players

What informed DIFFERENTIATE?

- Africa's rapidly increasing youth population is projected to be over 830 million by 2050 (UNDP, 2017), with an average age of youth population estimated to be 25 years of age by 2046.
- The ratio of upper secondary school enrolment compared to tertiary enrolment in sub-Saharan Africa is 4.7 (more than twice the global average).
- University education continues to be seen as the only basis of a guaranteed professional work life.
- Yet, despite this, currently more than half of 420 million young people in Africa are unemployed (African Development Bank, 2018).

Thinking entrepreneurially

What we hear...

- A huge desire across the board to want to engage in thinking entrepreneurially; and a desire to make a difference to the world beyond publishing research findings
- Many reasons why it might be challenging: institutional commitment & individual commitment

A new way of thinking...

- Practice and solutions: Using entrepreneurial thinking to create positive impact for communities
- Collaboration: working with others on those projects
- Place-based thinking: research projects or student projects tailored to the needs of your local area, communities, and regions

Project Objectives

- Develop a better understanding of place-based entrepreneurship in African universities.
- Understand the barriers and opportunities for place-based entrepreneurship in African institutions.
- Develop and test a Sustainable Stimulating Entrepreneurial Thinking Tool Kit for Scientists and Students (SSETS)
- Share knowledge learnt for capacity building and sustainable development.

Research Work and Finding

- We engaged with key stakeholders: academics/scientists, entrepreneurship educators, senior managers, science students, local policy makers, local investors, local NGOs, Community leaders, local key industry layers and local incubators/accelerators.
- **Online Surveys, Interviews and Zoom Meetings Discussions – in Nigeria, Ghana and Kenya**

Key Research Questions

- What are the institutional and wider drivers for stimulating entrepreneurial thinking that focuses on sustainability, SDGs and the circular economy amongst staff/students?
- How do you see your university contributing to the achievement of SDGs for a) your local area, b) the region, c) internationally?
- What are the key institutional and wider challenges in encouraging entrepreneurship, especially relating to SDGs, amongst staff and students?
- How important is sustainable entrepreneurship or entrepreneurial activities to achieve SDGs important to your local area?
- How might entrepreneurship help you achieve your goals relating to future sustainability and SDGs?
- How strong are your relationships to industry & to academia with respect to promoting entrepreneurship and start-up activities that work towards a more sustainable future?
- What types of businesses do you invest in locally?
- How many of these businesses are focusing on sustainability, circular economy or the achievement of other SDGs?
- What other kinds of support do you offer new start-ups alongside investment opportunities?

Key Outputs

- The research findings highlighted the widespread acknowledgement of the need to develop entrepreneurial capabilities within institutions, for both students and staff to change their mindset to embrace entrepreneurship, innovation and collaboration.
- The main barriers that we have identified so far are:
 - Lack of institutional support – yet to feed through to the development of entrepreneurial capabilities within institutions.
 - Lack of industry-academia relationships and knowledge exchange – there is a tendency for African academics and academic institutions to work in isolation.
 - Lack of knowledge and understanding on entrepreneurial thinking and action

Key Outputs

- Entrepreneurship is defined variedly by educators and students but the key words that ran through are creativity and innovation, value creation, idea translation and self-employment opportunity.
- One other thing that is used in defining entrepreneurship is impact.
- With this, entrepreneurship can be understood as creativity and innovation that leads to value creation and translation of ideas into product and services to impact positively on the individual and society.
- The universities offer course units on entrepreneurship to impact the entrepreneurial thinking in students. Entrepreneurial thinking become very necessary because of high unemployment rate among graduates due to the limited white color jobs in Africa

Key Outputs

- The key drivers of entrepreneurial thinking in the universities include; employment, impact driven teaching and learning, re-orientation and self-reliance, management entrepreneurial support for staff and students.

Key Outputs - Differences

Entrepreneurship Education

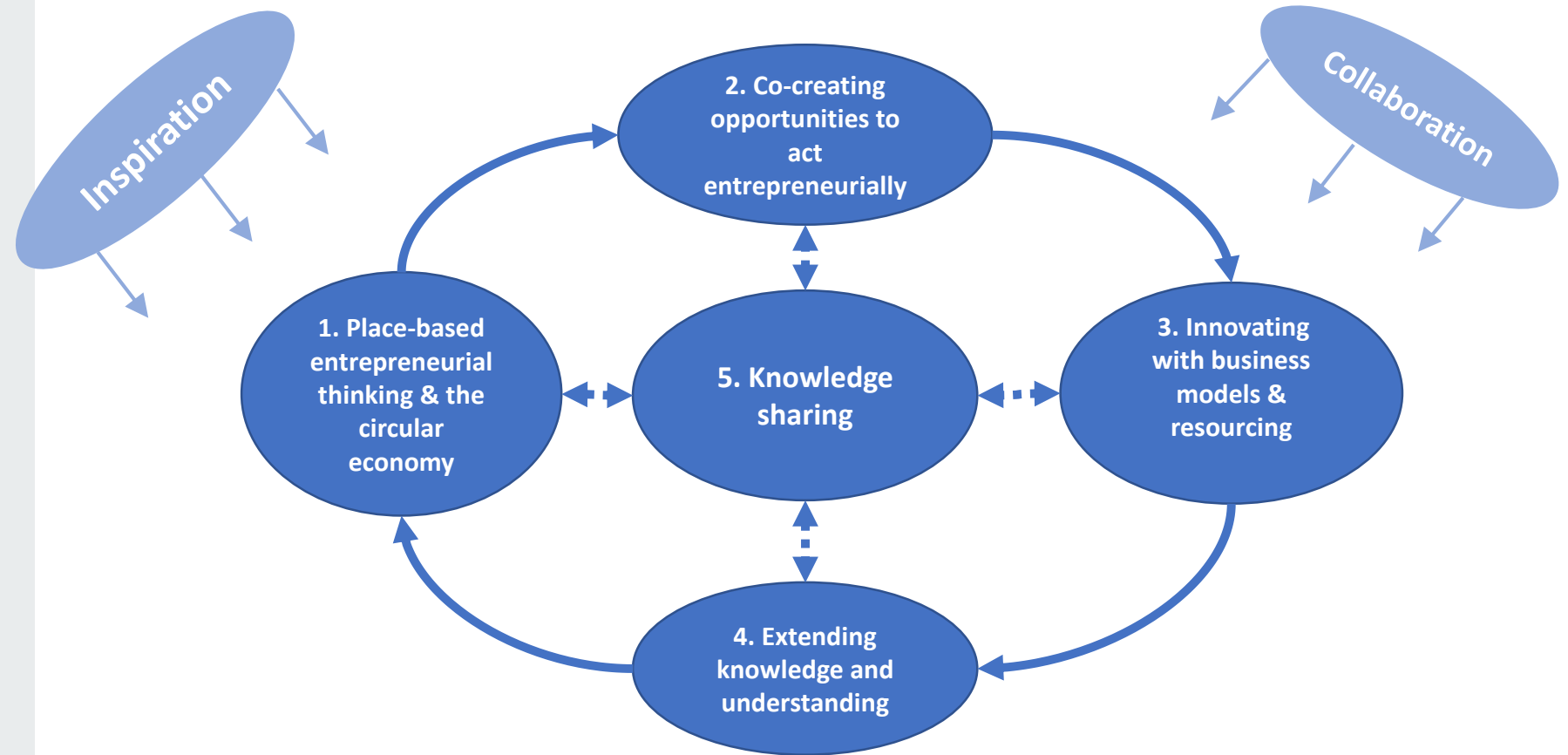
- Uniben has no entrepreneurship education programme designed for students but all undergraduate student at Kenyatta University must undertake an entrepreneurship education programme (business and science students). Lancaster University Ghana have entrepreneurship programme only for its business students.
- The University of Benin educators defined entrepreneurship based on the capacity of students to form their own businesses while the Kenyatta University entrepreneurship education seemed a lot more about developing the entrepreneurial mindset of their students. Lancaster University due to its international entrepreneurship ethos and profile (in relation to Lancaster University UK), focused on entrepreneurial thinking and mindset for its students.
- There was a practical approach to the entrepreneurship education delivered at Kenyatta University as students were encouraged to run their own enterprises on campus, while the education at University of Benin was a lot more theoretical.
- In Nigeria, Ghana and Kenya, there are policy framework and government policies that supports the development and delivery of entrepreneurship education in universities for students but the process of implementing these policies vary in different countries.
- Within the curriculum of entrepreneurship education in Nigeria and Ghana, there is a focus on business plans and business start-ups while there is a more generic entrepreneurship education that support providing solutions to societal problems at Kenyatta University.

Key Outputs - Differences

Entrepreneurship Ecosystems

- The entrepreneurship ecosystem at the University of Benin Nigeria being a campus within close proximity of the city center and therefore SMEs, is such that there is a lot of stakeholders from NGOs, start-ups entrepreneurs and banks but there is little or no strategic engagement with these stakeholders. Kenyatta University however is far removed from the city center and so there are no close local entrepreneurial stakeholders which the reason is why they depend on engagement with on-campus enterprises while encouraging students to set up more businesses on campus.
- There is a unit responsible for the development of entrepreneurship education at Kenyatta University, but they also support in the training of staff to be able to think entrepreneurially. This unit also exists in University of Benin Nigeria, but it is a lot more generic and teaches theory directly to students without engaging the staff especially scientists.
- All partners have some form of access to the wide range of stakeholders that could form a robust entrepreneurial ecosystem, whether on campus or without, but the need to establish those relationships is not very clear to them.

Framework for the SETS Toolkit



SSETS FOR SCIENTISTS



SSETS FOR STUDENTS

1. Unpacking place-based, student-led foundations

- What is entrepreneurship?
- Why is entrepreneurship important to us?
- What are the values underpinning those perspectives of entrepreneurship?
- Why are those values important to us, our context, and the people and places important to us?
- What role does (and should) sustainability play in entrepreneurship?

2. Defining the problems and challenges to be addressed

- What is the problem or challenge that we want to address?
- For whom is it a problem?
- Is the problem a social innovation challenge, a commercial opportunity, or a way to develop understanding of curriculum-specific knowledge?
- How might we better understand the problem?

3. Understanding available resources

- What kinds of resources might be useful to us?
- What resources might be available to us locally and regionally?
- How valuable might our networks be? (who else might we involve in our project?)
- Are there other resources needed?

4. Developing solutions

- Engaging in ideation to develop possible solutions (given available resources)
- Testing and refining solutions
- Understanding business models underpinning potential solutions

Participate Plus

GOALS

- To build Partnership across countries and sectors
- Information Dissemination
- Knowledge Exchange
- Capacity Building

- Achieved through
 - Workshop Package
 - Social Media Package

OUTCOMES

- Increase in appreciation and understanding of place-based entrepreneurship as an agenda
- Increase in the utilization of the SETS Tool Kit
- Increase in the entrepreneurship activities of students i.e. demand-driven thesis, career enhancing activities, webinars etc

CHALLENGES

- Disconnect between academia and industry
- Institutional bureaucracy to make transformational change
- Limited resources especially in a COVID era – restriction
- Minimal focus of entrepreneurship by STEM-based lecturers.

Important Dates

- Kenya Stakeholder Meeting – July 11th
- Ghana Stakeholder Meeting – July 15th
- Final Stakeholder Meeting – Lagos – August 4th

THANKS TO SPONSORS



THANKS TO PARTNERS

