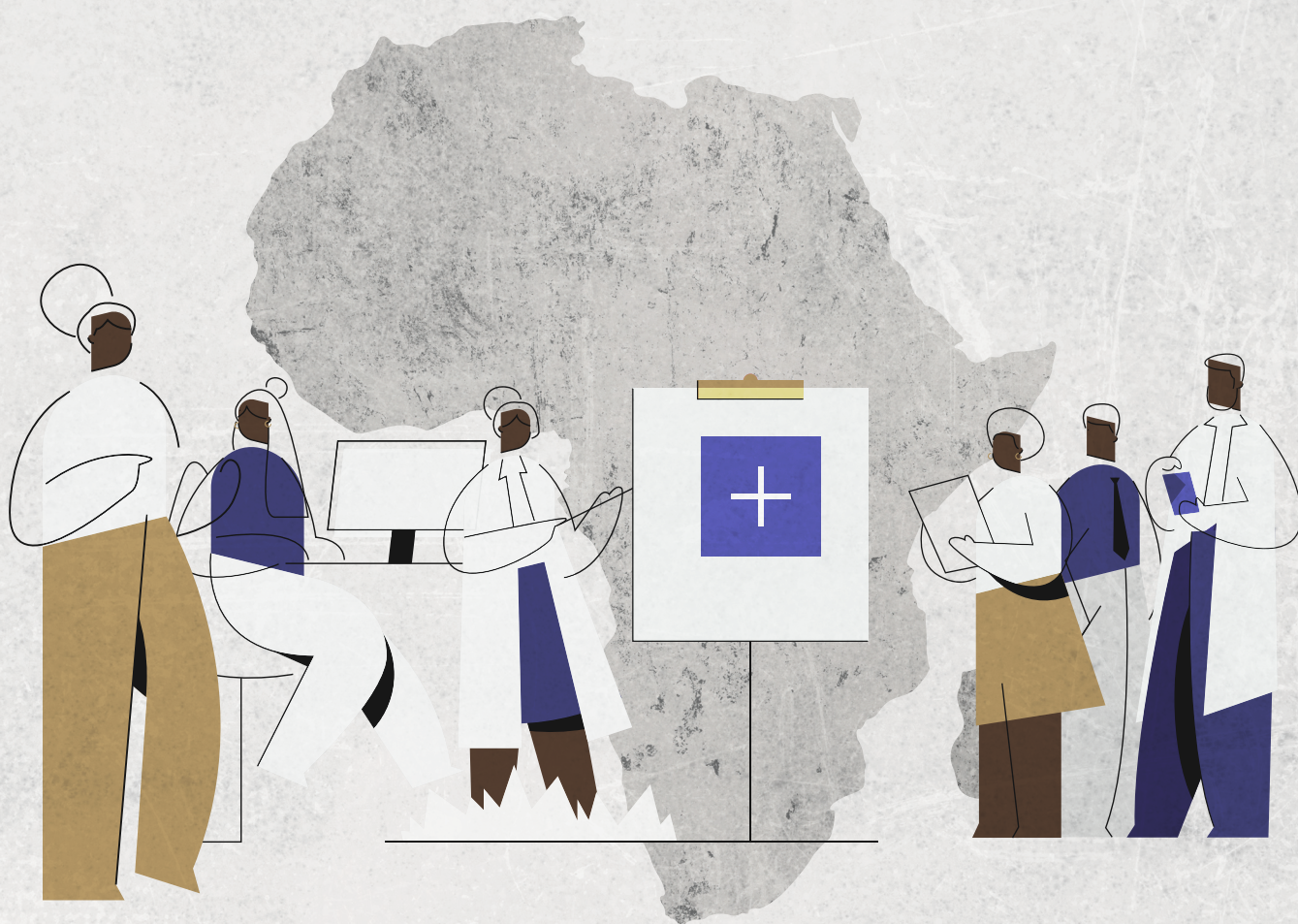


Stimulating Entrepreneurial Thinking in Scientists (SETS)

Guidance for Facilitators



**Using entrepreneurial thinking to create
greater impact from research activities**

 **RECIRCULATE**

The aim of the SETS toolkit

Universities and research institutions across Africa play a vital role in the design and development of innovative solutions to local and global challenges. The challenge for African scientists, academics and researchers is to go beyond publishing research papers from their work, and to ensure that their research leads to real impact in the communities and regions that matter to them.

This toolkit provides the essential ingredients to engage scientists, researchers and academics in thinking more entrepreneurially, and being more creative in how they generate greater impact from their research activities.

Who is the SETS toolkit for?

The toolkit is designed for colleagues within African institutions who wish to facilitate their own workshops to encourage entrepreneurial thinking amongst researchers, scientists and academics. Although the toolkit is self-contained, and there is no need for facilitators or participants to have any prior knowledge of entrepreneurial thinking or the creation of impact from research, the toolkit is designed for facilitators who have some facilitating experience.

Facilitators new to using entrepreneurial thinking to create impact from research will be able to follow the sessions described in this document. As facilitators gain experience there is ample opportunity to tailor each session to their own needs and the needs of different participant groups.



The structure of the SETS toolkit

The SETS Toolkit provides the content, structure and tools needed to deliver a series of four workshops that use ideas from entrepreneurial thinking to engage participants in thinking about new ways to create greater impact from their research activities.

The four workshops can be seen in Figure 1 below. Progression through the workshops will lead to the development of an entrepreneurial eco-system of support for colleagues to create impact from their research.

Figure 1: Structure of the four workshops that lead to the development of an entrepreneurial eco-system



Each workshop is designed to be around 2.5 to 3 hours in length. The first three workshops can be run consecutively over 1 or 2 days or spread over a few weeks, but we would recommend at least a week between the third and fourth workshops to enable participants to begin work on their projects.

By the end of Workshop 1 participants will have gained a deeper understanding of how entrepreneurial thinking translates to the context of creating impact from research activities.

In Workshop 2 participants will work to identify opportunities from their own research and to understand where they might be able to create the greatest impact.

In Workshop 3 participants will explore their networks and identify available resources to create impact from their research. Participants will leave with an action plan that will enable them to take their first steps towards creating impact from their research.

In Workshop 4 participants return to explore progress on their projects, work to identify and overcome challenges, and identify further opportunities for collaboration moving forward.

Some useful tips for facilitators using this toolkit

- Ensure all participants are able to contribute and feel that their views are important to the discussions
- Encourage all participants to get involved in the discussions, but also recognise that some participants may be less comfortable speaking in large groups
- Ensure each workshop finishes on a positive note and with a clear action plan for the way forward; this is important to encourage engagement in subsequent sessions

Format of the SETS toolkit and workshop sessions

The toolkit comprises this document, which describes in detail each workshop, alongside supplementary handouts. The toolkit has been designed for in-person delivery of workshops, but there is an opportunity to tailor each workshop to online delivery.

When running workshops, we would encourage a café style room layout to encourage group activities. For more productive group discussions, we would also recommend the use of materials such as flip-chart paper and pens for participants.

Facilitators might also wish to scribe notes from class discussions on flip-chart paper / interactive boards, or engage participants in using post-it notes, etc. to capture key discussions and outputs.

The workshops will run most effectively with between 15 and 30 participants, but there is scope to run the workshops with larger or smaller groups, adjusting the format of activities accordingly.

For each session within the workshops, we have suggested one of three different formats for engaging with participants:

- **Room discussions:** that engage all participants in a discussion
- **Small group discussions:** 4/6 participants around a table; we would encourage the facilitator to change the groups occasionally so that participants work with different people
- **Individual creative sessions:** individual activities

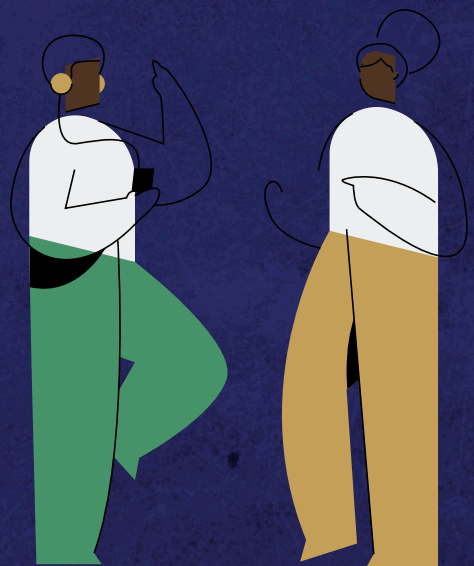


Duration of workshop activities

Each workshop activity has a suggested duration in the left-hand margin, indicated with a clock symbol. You may wish to adapt the length of each session to your own requirements. The toolkit also includes suggested breaks for tea/coffee.

Workshop 1

Defining place-based entrepreneurial thinking



WORKSHOP 1:

DEFINING PLACE-BASED ENTREPRENEURIAL THINKING

PURPOSE:

To explore and develop participants' understanding of entrepreneurial thinking applicable to their own research and institutional environments. The workshop will be around 2.5 to 3 hours in duration.

KEY AREAS COVERED:

- What does entrepreneurial thinking mean to you and your role as an academic/scientist/researcher?
- How might you create impact through thinking more entrepreneurially about your research?
- How might entrepreneurial thinking contribute to the goals of your institution?

SUPPORTING RESOURCES

Resource 1.1: Powerpoint Slide on Entrepreneurial Thinking.

WORKSHOP ACTIVITIES

10/20 MINS



1. Introduction

Introduce yourself to participants.

Introduce participants to the purpose of the workshops, including your institution's aspirations and goals for stimulating entrepreneurial thinking amongst its scientists, academics and researchers, and why creating impact from research activities is important to the region.

Introduce participants to the goals and format of the first workshop. Depending on the number of participants, you may also want to allow time for participants to briefly introduce themselves.

There will also be other general "housekeeping" announcements to make, including health & safety, participant etiquette (e.g. switching mobile phones on silent), workshop timings, etc.

10 MINS



2. What is entrepreneurship?

Room discussion: Open up a discussion amongst all participants by asking them for definitions of 'entrepreneurship'. The session should encourage broad definitions of entrepreneurship, beyond a focus on business start-up, and to instead view entrepreneurship as a process of bringing about innovative solutions that create a positive impact on the world. The session is also a good way to actively encourage all participants to engage in discussions from the start and to feel that their opinions are being heard.

WORKSHOP 1:

DEFINING PLACE-BASED ENTREPRENEURIAL THINKING (cont.)

15 MINS 

3 What do we mean by entrepreneurial thinking?

Room discussion: Given the broad scope of 'entrepreneurship' from the first session, now ask groups to define what we mean by entrepreneurial thinking – encourage participants to make suggestions and widen the scope of what entrepreneurial thinking is.

Room discussion: Introduce slide (Resource 1.1) based on an entrepreneurial thinking framework. This will be used as the basis for discussion in the next session.

30 MINS 

4 Roles and scope

Room discussion: Ask the audience to identify different roles in the room: e.g. academics, scientists, researchers, educators, and other participants. Some people may identify as two roles, e.g. educators and academics.

Small group discussion: Ask small groups of participants to discuss how skills in entrepreneurial thinking (from resource 1.1 as well as other definitions from the audience in the previous activities) might apply to their roles (as researchers, scientists, academics, etc.). Key questions for the groups might be: What might entrepreneurial thinking look like for you and your role? How might your institution benefit from more entrepreneurial thinking?

Room discussion: Ask each group to feedback what their key discussions have been, and build this into a room discussion.

15/20 MINS 

Break for tea/coffee

40 MINS 

5 Ambition and impact

Building on the earlier sessions, this activity engages participants in thinking further about what they would like to achieve through creating impact from their own research.

Individual creative session: Encourage participants to think individually about what they would like to achieve in the future, considering questions such as: How might you create wider impact from your work? How ambitious can you be? What kinds of impact do you want to achieve longer-term?

Small group discussions: Participants to form small groups and share their ideas from the individual creative session above. Groups should be encouraged to help each other draw out new perspectives of what they might wish to achieve.

Room discussion: Groups present key thoughts and ideas from their discussions. As a facilitator you might wish to capture these on flip-chart paper / interactive board and refer to them in future workshops as a recap for participants.

WORKSHOP 1:

DEFINING PLACE-BASED ENTREPRENEURIAL THINKING (cont.)



10 MINS

6 Make-a-Difference from Research award

The purpose of this activity is to get participants thinking about how they might be able to make a positive difference to the world based on their areas of expertise and their research.

Individual creative session: Provide participants with 30 seconds to think about what achievement they would want to be awarded with in 2-5 years' time if they won a prestigious Make-a-Difference from Research award.

Room discussion: After the allotted time, ask participants to share their Make-a-Difference from Research achievements.



10 MINS

7 Wrapping up

As a facilitator, it's good practice to use this session to recap on key discussions and ideas that have emerged from the workshop, how outputs from this workshop will feed into subsequent workshops, and provide an overview of the second workshop.

Homework for participants: Participants should be asked to think more about their Make-a-Difference from Research Award and what kinds of projects they might work on in the future to achieve that award. This will be developed further in Workshop 2.

Workshop 2

Identifying opportunities to act entrepreneurially



WORKSHOP 2:

IDENTIFYING OPPORTUNITIES TO ACT ENTREPRENEURIALLY

PURPOSE

To work towards understanding how participants might be able to create an impact from their own research, interests and work projects. The workshop will be around 2.5 to 3 hours in duration.

KEY AREAS COVERED:

- Identifying opportunities to create impact from research
- Understanding who the key beneficiaries might be
- Identifying strengths and skills to create impact

SUPPORTING RESOURCES

- Resource 2.1: SETS Power Wheel

ACTIVITY BREAKDOWN

15 MINS 

1 Introduction

Introduce the second workshop, its aims and objectives.

Room discussion: To begin the workshop, ask participants to briefly reflect back on their Make-a-Difference from Research awards and ask whether their awards might have changed or developed since the first workshop.

45 MINS 

2 Beneficiaries and measures of success

Small group discussions: Participants work in small groups to discuss and list the potential key beneficiaries of their research; groups should look to expanding the list of potential beneficiaries.

Small group discussions: Groups to discuss what 'measures of success' might look like for their beneficiaries, and how they will know they have created impact from their research.

Room discussion: As a room, discuss the lists of beneficiaries and measures of success from each group's discussions; as a facilitator it might be worth capturing these beneficiaries on a flip-chart or interactive board.

15/20 MINS 

Break for tea/coffee

WORKSHOP 2:

IDENTIFYING OPPORTUNITIES TO ACT ENTREPRENEURIALY (cont.)

45 MINS 

3 Identifying opportunities and projects to make a difference

Individual creative session: Participants to work individually to identify an initial project they will work on towards their Make-a-Difference from Research award, based on creating impact from their research that is targeted towards a specific beneficiary. Highlight to participants that for the initial project they should focus on one clear beneficiary group, rather than trying to do too much work from the start.

Small group discussion: Participants share their project ideas and receive feedback, comments, and ideas from other members of their group.

40 MINS 

4 Identifying key skills and strengths

Refer to Resource 2.1: SETS Power Wheel framework

Room discussion: introduce the SETS Power Wheel to participants and explain how it can be used

Individual activity: Ask participants to complete the SETS Power Wheel framework for:

- a) Where their existing strengths, skills and expertise lie
- b) What strengths, skills and expertise they might need to complete their initial projects, thus identifying potential skills gaps on the SETS Power Wheel

Small group discussion: Participants to share their SETS Power Wheels with other group members and discuss how they might work to building their strengths, skills and expertise to create impact from their research.

Room discussion: Ask participants to share their ideas for building strengths, skills and expertise in order to create greater impact from their research.

10 MINS 

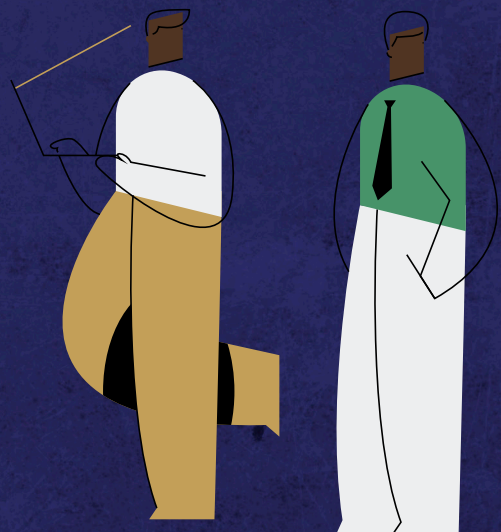
5 Wrapping up: link to aspiration and ambitions

Use this session to recap on key discussions and ideas that have emerged from the workshop, how outputs from this workshop will feed into subsequent workshops, and provide an overview of the third workshop.

Homework for participants: Participants should further develop and refine the initial projects they have identified to create impact from their research.

Workshop 3

Exploring resources and approaches for meaningful entrepreneurial action



WORKSHOP 3:

EXPLORING RESOURCES AND APPROACHES FOR MEANINGFUL ENTREPRENEURIAL ACTION

PURPOSE

The purpose of this session is for participants to recognise the resources they have to hand to complete their projects and to consider additional resources available through their networks. The workshop will be around 2.5 to 3 hours in duration.

KEY AREAS COVERED:

- Exploring resources necessary to achieving project goals
- Reviewing resources available through networks
- Exploring additional stakeholders and additional resources

SUPPORTING RESOURCES

- Resource 3.1: Network map: examples

ACTIVITY BREAKDOWN

15 MINS 

1 Introduction

Room discussion: As a warm up to the third workshop, ask participants to recap what their first small project will be to create impact from their research, you should also ask participants to state how they have worked to refine and develop their initial project ideas. Follow the room discussion with a general introduction to the third workshop.

20 MINS 

2 Network mapping

Introduce the concept of network mapping and provide an example network map either from the resources in this workshop (resource 3.1), or draw your own network map for participants to use as an example of what they will be working on

Individual creative session: Provide participants with paper and ask them to draw their own network maps based on their existing networks – focusing on people in their networks who might be able to help them with their projects. Encourage participants to think beyond their own organization / institution.

Individual creative session: After participants have drawn their existing network maps, ask them to now add to that map with a 'fantasy network map': that is, who would they want in their networks in order to create more meaningful impact from their research?

WORKSHOP 3:

EXPLORING RESOURCES AND APPROACHES FOR MEANINGFUL ENTREPRENEURIAL ACTION (cont.)

65 MINS 

3 Resources: types of resources and availability

Room discussion: Initially encourage participants to identify different types of resources (e.g. financial, knowledge, social, human, cultural resources, etc.) that people within their networks might be able to provide to help them with their projects.

Small group session: Ask participants to work in small groups, to introduce their projects, their network maps, and to work together to identify the different ways in which each stakeholder on their network maps might contribute to them achieving their projects (i.e. what resources might their network contacts provide?). Encourage participants to update their network maps as they work together (see example network maps with resources).

Room discussion : Go around the room and encourage each table to share their key discussions, indicating anything that was surprising or revealing from their discussions.

15/20 MINS 

Break for tea/coffee

4 Action planning

Individual creative session: Ask participants to initially develop a list of resources necessary to carry out their projects. Ask participants to then think about: who within your networks might provide those resources or further help with your project? Who else might you want to add to your 'fantasy network' and how might you develop relationships with those people? The output of this session will be a 'resourcing action plan' which will outline resources and key networks.

Small group discussion: Organise participants into small groups and ask them to discuss each other's resourcing action plans, and for groups to provide constructive feedback to help each other refine and shape their resourcing action plans to enable them to create the greatest impact from their research.

5 MINS 

5 Participant pledges

Individual creative session: To finish off the workshop, ask each participant to pledge some of their time (1-3 hours) over the next few weeks to taking the first step towards their projects and towards achieving their resourcing action plans.

WORKSHOP 3:

EXPLORING RESOURCES AND APPROACHES FOR MEANINGFUL ENTREPRENEURIAL ACTION (cont.)

10 MINS



6 Wrapping up: link to aspiration and ambitions

Use this session to recap on key discussions and ideas that have emerged from the workshop, how outputs from this workshop together with the pledges and homework will feed into the final workshop. Provide an overview of the final workshop.

Participants should be given plenty of time (one to four weeks) to work on their projects, and resourcing action plans before the final workshop.

Homework: Participants work on their initial projects over the next few weeks, beginning with their pledge, but also further working on their ideas to create impact from their research.

Workshop 4

Review, reflect and grow forward



WORKSHOP 4:

REVIEW, REFLECT AND GROW FORWARD

PURPOSE

The purpose of this final workshop is to review participants' activities and progress towards their action plan, for the group to reflect on how they might create greater impact from their research, and to also look to how they might expand their entrepreneurial eco-system of support for the creation of impact from research. The workshop will be around 2.5 to 3 hours in duration.

KEY AREAS COVERED:

- Exploring progress made towards action plans
- Identifying ways by which the group can build greater impact and overcome challenges as they arise
- Identifying opportunities to expand the entrepreneurial eco-system of support

ACTIVITY BREAKDOWN

20 MINS 

1 Introduction

Facilitator to introduce the fourth workshop.

Room discussion: Encourage participants to share key achievements since the third workshop.

20 MINS 

2 Achievements and entrepreneurial journey experiences

Small group discussions: Participants work in small groups to present their journeys towards their action plans, and the key lessons they have learned along the way.

Room discussion: Groups asked to share their progress and lessons learned to the room.

40 MINS 

3 Key challenges

Small group discussion: Ask each group to reflect on the key challenges they have faced on their journeys to creating impact.

Room discussion: Groups asked to share their key challenges - either through post-it notes, or through the facilitator documenting the challenges on a board/flip-chart in the room.

WORKSHOP 4:

REVIEW, REFLECT AND GROW FORWARD (cont.)

Room discussion : Using the key challenges highlighted in the previous room discussion, participants should now work as a group to organise the outputs from the previous discussion (i.e. key challenges) into key themes. The room should identify and agree 3 key themes they would like to focus on in the next session.



15/20 MINS

Break for tea/coffee



65 MINS

4 Overcoming those challenges

Small group discussion: How can participants and groups use the power of their networks, and the resources within those networks, to overcome the key challenges (or themes of challenges) identified in the previous session and thus help to move everyone's projects forward? This might involve collaborations between participants, between their wider networks, or (as an example) through creating guest speaker workshops as a follow-up to the series of SETS workshops.

Room discussion: groups share the various ways they will work to overcome the key challenges, whilst the facilitator captures those ideas on a flip-chart / interactive board.



30 MINS

5 Continuing the good work and growing forward

Small group discussion followed by room discussion: Ask participants to discuss how they might continue to work together in the future to develop and carry out their projects. One suggestion might be for a kind of 'buddy scheme' where pairs or small groups of participants continue to work together, following each other's progress, and working together to create impact. As a facilitator, it is important to leave this session with a clear plan of how people will be working together to help each other on their projects.

Room discussion: Ask participants to discuss how they might further develop an entrepreneurial eco-system of support by encouraging other colleagues to organise and attend the same series of SETS workshops for the creation of impact from research. Maybe also encourage participants to discuss how they might help with further iterations of the SETS programme.



10 MINS

6 Wrapping up and ensuring continuation of the good work

Use this session to recap on key discussions and key action points arising from this workshop to ensure the good work of the group continues. Wish everyone well on their journeys to using entrepreneurial thinking to create impact from their research.

