NATURE WORKS

HONG KONG

WORKSHOP SERIES
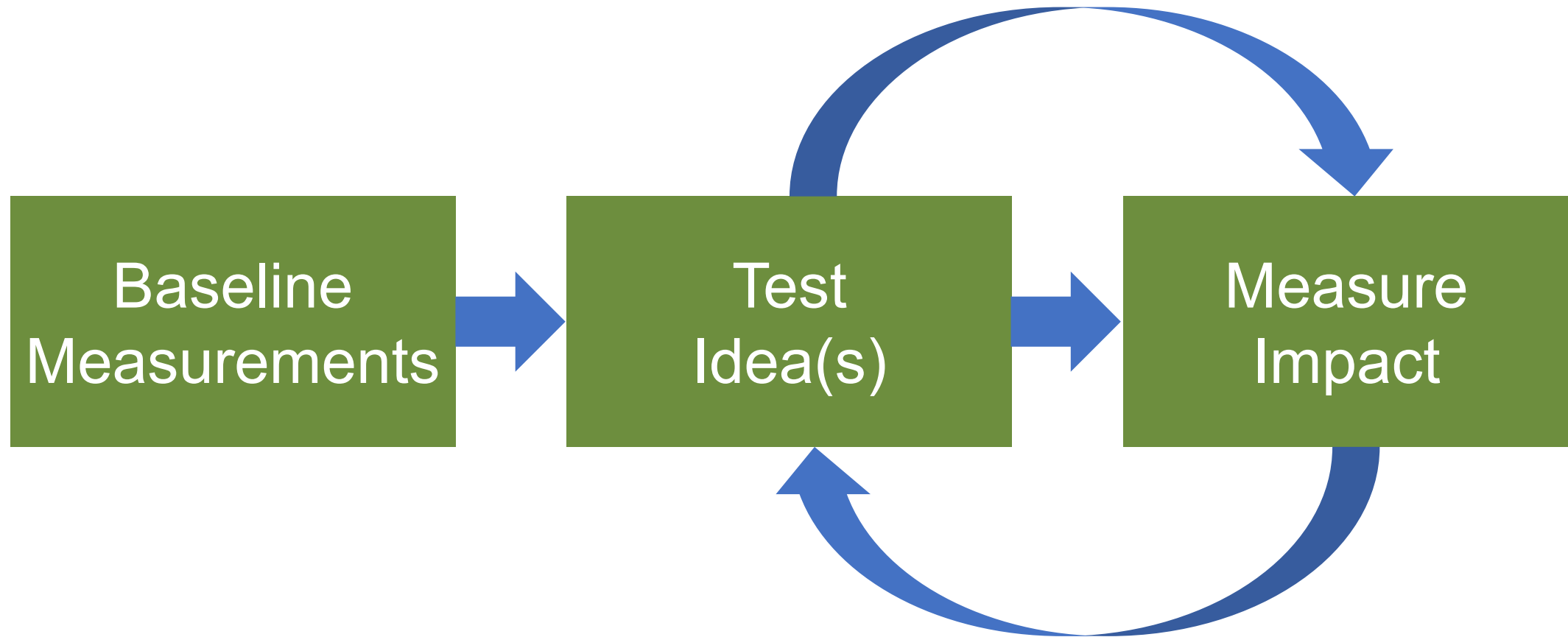
About you…..

Baseline Measurements → Test Idea(s) → Measure Impact

Why Are We Here?

Measurement

Understanding when and how to collect data, how to store it, and how to share it

Analysis

Interpreting data to make sense of your findings

Adaptation

Adjusting ideas based on analysis to continue to expand impact or make necessary changes in strategy

NATURE WORKS
HONG KONG

Workshop Objectives

1. Project Action Plan

2. Data Collection & Analysis Plan

- How will you measure ?

- How will you interpret/analyze?

- How will you adapt/deal with obstacles?

3. Community Impact Assessment Plan

What is a Pilot Project?

- Pilot

= *a **small scale** experiment*
≈ feasibility study

- Objective of a pilot

= to identify effective strategies in driving impact /reaching your goal

"WOULD YOU MIND HOLDING MY HAND, JIM?
THE TRUTH IS, I'M DEATHLY AFRAID OF FLYING."

© Guv & Rodd/Distributed by Universal Uclick via CartoonStock.com

TNC Lantau Biodiversity Mapping
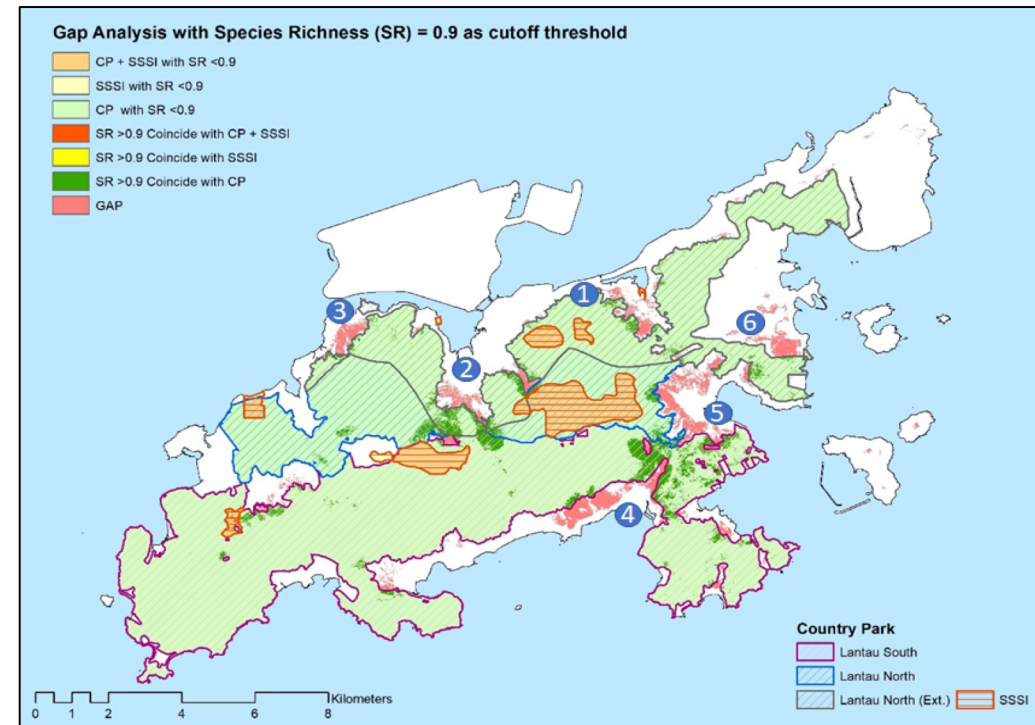

- A real world feasibility study…

Conservation Goal: Identify important biodiversity hotspots that are currently not protected (=conservation gaps)

Project Goal: Biodiversity mapping and conservation gap analysis using habitat modeling

Measurement: methodology choice & data collection

Analyze: available data (and unavailable data!)

Adapt: learnings and new strategy

Gap Analysis with Species Richness (SR) = 0.9 as cutoff threshold

- CP + SSSI with SR <0.9
- SSSI with SR <0.9
- CP with SR <0.9
- SR >0.9 Coincide with CP + SSSI
- SR >0.9 Coincide with SSSI
- SR >0.9 Coincide with CP
- GAP

Country Park
- Lantau South
- Lantau North
- Lantau North (Ext.)
- SSSI

Kilometers
0 1 2 4 6 8

TNC Lantau Biodiversity Mapping

Goal: Biodiversity hotspot mapping and conservation gap analysis: feasibility study

Plan A: *What should have happened…..*	Reality: *What actually happened…..*	Plan B: *How did we adapt…..*	Achievements: *how we progressed towards our goal*
- Updated species data available (from AFCD) - Updated habitat imagery coverage	- No data for marine species/ habitat - Outdated terrestrial data - Limited data outside protected areas	- Use data we had (with understanding of limitations) -Review all other sources of data in literature	- Identified knowledge gaps (we now know what we don't know) - Recommendations for next steps

Recap Activity– Action Plan

- Identified problem

- Ultimate goal

- Strategy/methodology choice to get from problem to goal

> Goal of pilot project is to assess to effectiveness of your strategy

Activity – Pilot Project Action Plan

| August | → | Action/Task | → | Action/Task | → | Action/Task | → | October |
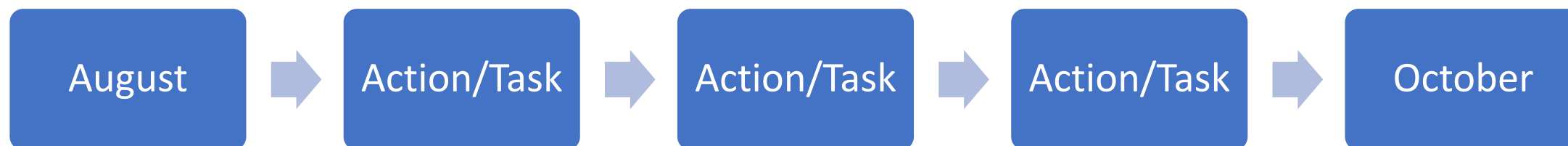
- What's the first step in your strategy?
- Then what happens?
- Break your strategy/project idea into simpler, bite sized tasks

Activity – Identifying Obstacles

- What are some potential obstacles? (think broadly)

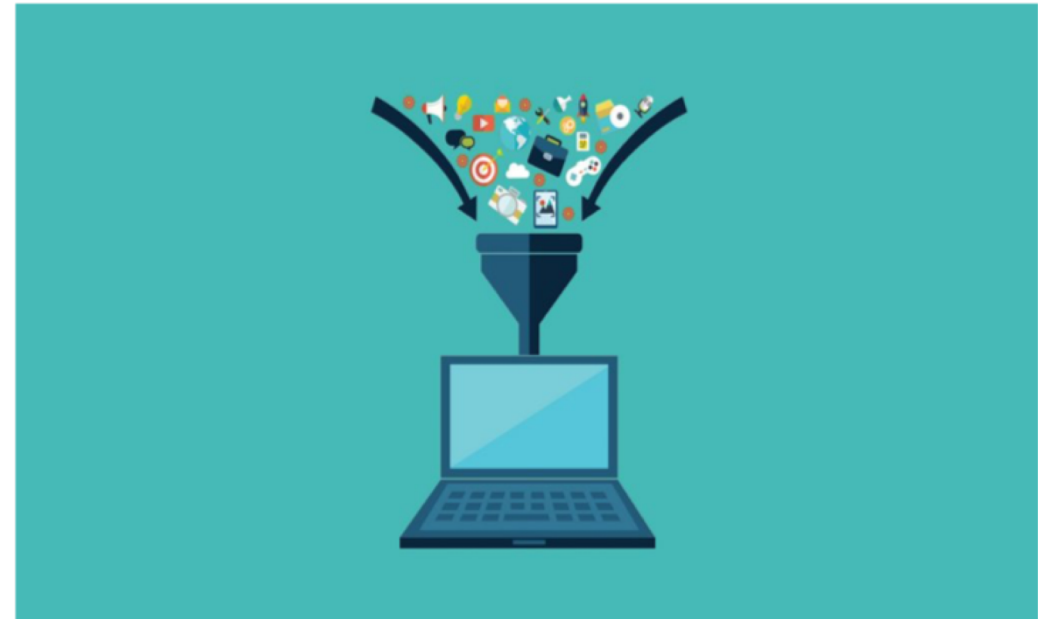- Go back to your timeline and attach the obstacles to milestones

Data Collection – Early & Often

Pilot = possibility that it won't work

Fail fast - if it's not working, find out soon so you can adjust

What will tell you if your project idea is not working?

Activity – Data Collection Plan

How do you collect data?
- Logistics of collection
- Tools needed
- Storage of data
- Sharing data within group

When do you collect data?
- How soon can you test effectiveness?
- Plan 5+ measurements on your timeline

What access do you have?

What access do you lack/need?
- How will you get it?
- What if you don't get it?
- Backup sources

Data Interpretation

1. What are you looking for? (connect to your original hypothesis)
2. Types of analysis
3. Assessing your project – what will tell you it is working?

IT'S WORKING:

how can you expand/grow/develop?

IT'S NOT WORKING YET:

what did you learn?

how can that your inform next steps?

Activity – Data Interpretation Plan

For each planned measurement:

What data or statistic will indicate your project is working?

- E.g. paper recycling collection amount is >5kg

What data or statistic will indicate that it's not having the desired impact?

- E.g. PM2.5 in the classroom is not dropping at the expected rate

Why not?

Adapting based on Data

NATURE WORKS HONG KONG

	YES	NO – How to adapt?
Measurement: *Is your data readily available?*	>Interpretation Plan	Will you get it in time? What other sources of data can you use?
Analysis: *Is your strategy working?*	> Larger scale implementation Plan	Is it too early to see results? Are you measuring the right statistic? Do you need to change your strategy? What have you learned?

Success

Success

what people think it looks like

what it really looks like
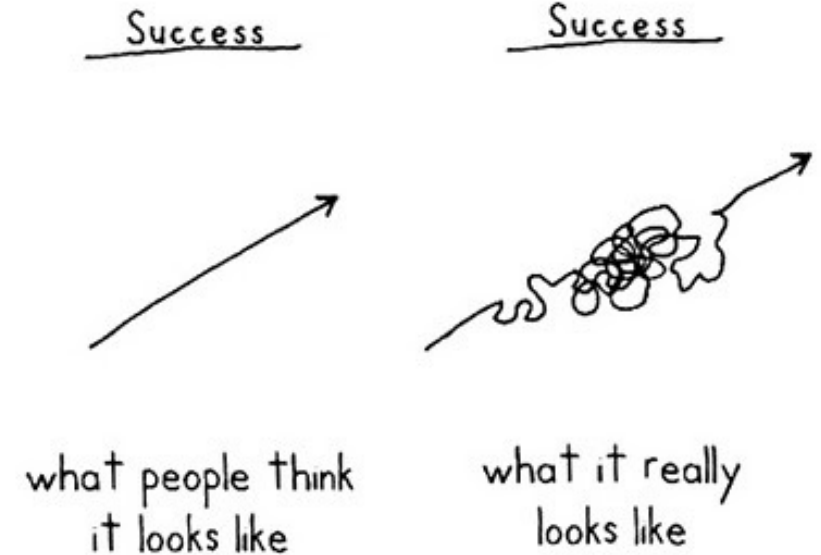
Activity – Adaptation Planning

At what point on your action plan might you consider a different methodology/strategy to achieve your goal?

E.g. if by week 4, we're unable to convince facilities management to plant more trees on the 4/f roof, we'll shift to a new target planting location on the 2/f

For each measurement point on your plan, identify possible actions if the data is showing that it's not working

E.g. if electricity consumption isn't decreasing in 2 weeks in 3/f classroom, try adjusting messaging to users of classroom

Community Impact

Your work will influence your school community:

- building knowledge

- changing attitudes

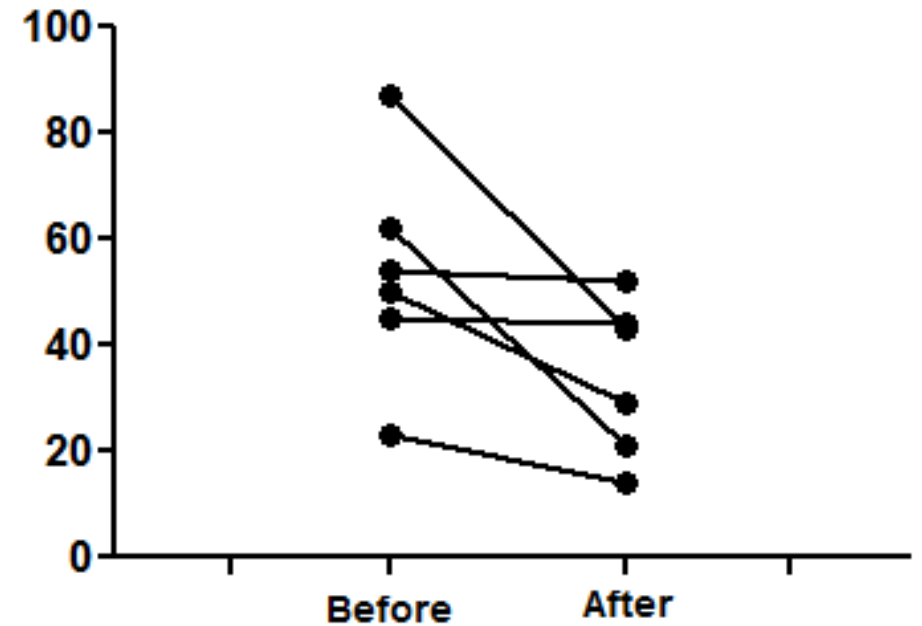Survey your community to collect data on that impact

We've made it easy!

Activity – Community Impact assessment plan

2 data points to compare impact

When will you survey – pick 2 points on your action plan

Key Takeaways

1. You <u>will</u> hit unforeseen roadblocks and obstacles

2. <u>All</u> roadblocks are informative

3. You <u>will</u> make progress toward achieving your goal

4. Set realistic objectives of a pilot project

"We will achieve our goal" vs." We will better understand how to achieve our goal"