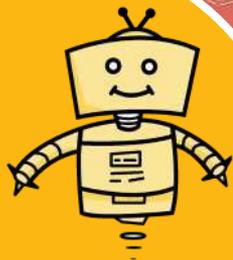




Design Thinking for Teacher Innovations

Assessing the Process in
Dar Es Salaam and Lindi- 2022



AGA KHAN FOUNDATION



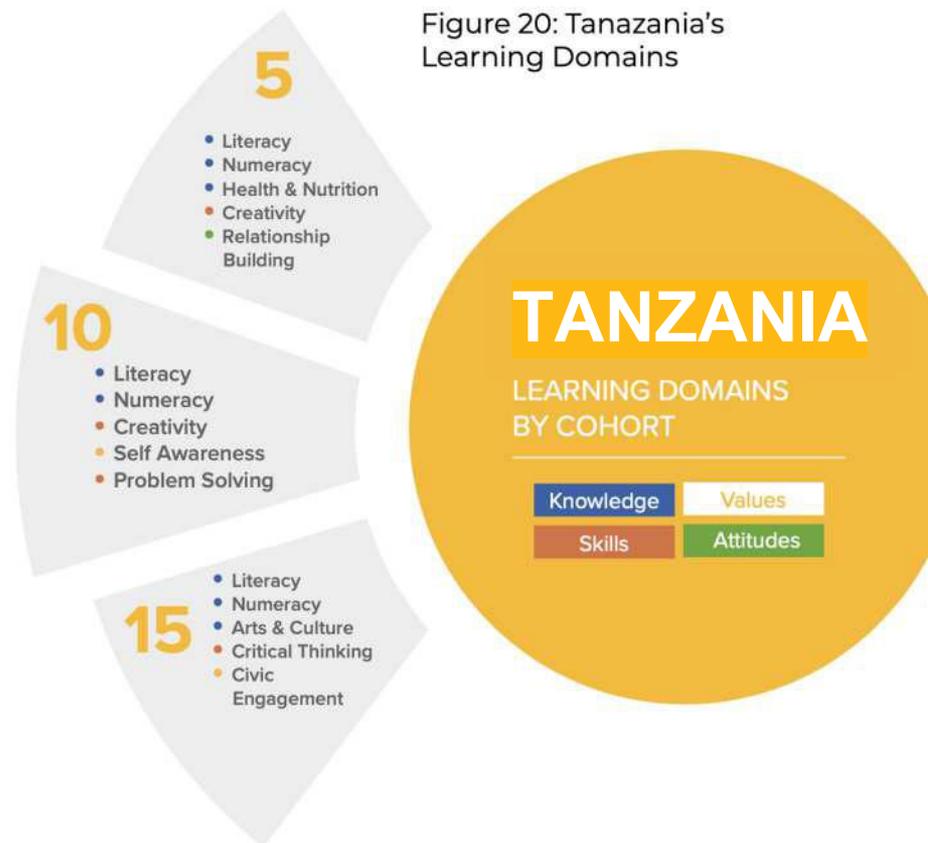
ThinkPlace
Kenya

About Schools2030

Schools2030 is a ten-year participatory action research and learning improvement programme based in 1,000 government schools across ten countries, currently in its third year of implementation (the 2nd for the full rollout of the programme). Using the principles of Human-Centred Design and focusing on the key transition years of ages 5, 10 and 15 years old, Schools2030 supports teachers and Youth Development Partners to design and implement education micro-innovations. These low-cost and scalable innovations will inform and transform education systems to improve holistic learning outcomes for the most marginalised learners worldwide. In Tanzania, the programme is being implemented in 100 schools and youth development partners across Lindi and Dar es Salaam.

Schools2030 seeks to dramatically change the status quo by equipping frontline teachers, school leaders and Civil Society Organizations (CSOs) with the knowledge, skills, and platforms to better design, measure and showcase new solutions to achieve Sustainable Development Goals 4 (inclusive and equitable educations) and Goal 8 (sustained and inclusive economic growth) by the year 2030.

The diagram on the right presents the selected learning domains to address through the HCD process for each of the cohort age groups in Tanzania.



Project Brief

LEARNING & REPORTING PARTNER

ThinkPlace Kenya has been engaged as the Learning and Reporting Partner to evaluate the efficacy of the Schools2030 programme in the delivery of the 2022 Human-Centered Design (HCD) process in Dar Es Salaam and Lindi, Tanzania.

A number of learnings and recommendations from the 2021 assessment of the process were integrated into the 2022 process. Using a qualitative approach, the research has interrogated the participants' learning journeys, pain points with the process, and the underlying barriers and enablers to the adoption of HCD. ThinkPlace intentionally sought to understand what was and was not working well with regards to the main changes to this year's process and in the programme's alignment to its overall objectives.

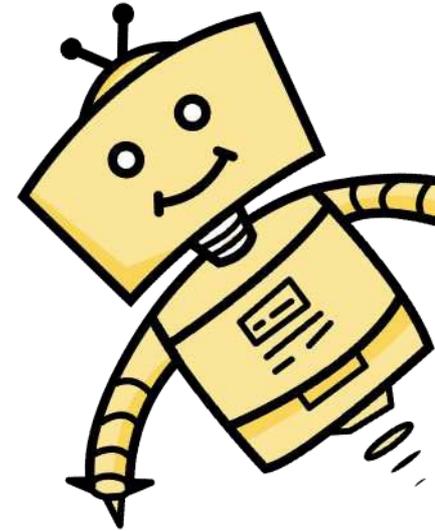
The assessment took place over one week in October 2022 in Dar Es Salaam, and remotely with Lindi participants reflecting in their experience of the 2022 programme.

The learnings are communicated as lessons, successes and recommendations for the next iteration in the following year of the process.

The recommendations provided are informed by ThinkPlace's expertise and experience with HCD, adult learning principles and behavioural and cognitive models in order to design more effective and contextualised future learning experiences.

WHO IS THIS DOCUMENT FOR?

This document is intended for the Aga Khan Foundation, the Schools2030 programme team and the National Advisory Committee. It is also for schools and partners within the wider education ecosystem. This includes Ministry of Education representatives, other teachers, development partners, research partners and private sector partners in the education space.



Executive Summary

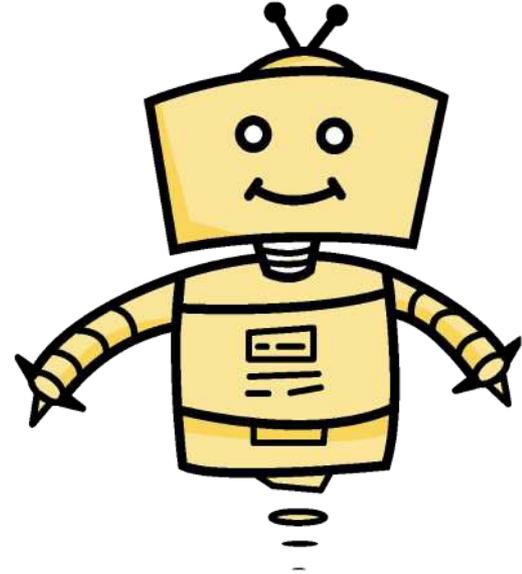
This document shares the key observations, insights and recommendations gathered by Thinkplace, the Tanzania Schools2030 learning partner.

Overview

Overall, in its second year it's clear the Schools2030 HCD design sprint has been adapted in line with recommendations from last year's HCD assessment. This year the teams-based design sprint format has enabled a learning environment where participants share ideas and learn with each other, as well as reducing the workload for Project Officers evaluating innovations. Combining the activities into one design sprint encouraged ideas to flow better from one session to the next and led to more engaging facilitation through a greater emphasis on activities for users to work through. However, in order to further improve and iterate the process there are new learnings and recommendations that could be considered for next year.

Structure of document

The next two slides summarise in a table the key insights gathered through interviews, observations and a review of the HCD toolkit. These insights have been grouped according to thematic area e.g. 'Driving awareness, motivation and engagement'. Further information regarding the observations and quotes underlying each insight can be found from page 24 onwards. Each insight is linked to a potential recommendation for how to further improve the design sprint in relation to the relevant insight. Further detail around the recommendations and how to implement them can be found on page 45 onwards.



Executive Summary

Theme	Insight	Recommendation
Driving awareness, motivation and engagement	<u>Participants gained positive benefits through application of their innovations and new skills to their day to day</u>	<u>Further encourage motivation to take part and drive engagement by highlighting different value propositions for participants and the additional benefits gained from taking part in the programme</u>
	<u>Limited awareness of the programme means new participants can't prepare in advance and could have varying expectations</u>	<u>For new joiners raise awareness of HCD programme goals and outcomes ahead of the training. E.g. through a pre-pack priming them on HCD, so they can start understanding the programme objectives and process in advance</u>
	<u>Despite positive reports on the facilitation quality there were varying engagement levels across the design sprint</u>	<u>Continue to make facilitation more engaging by including energisers and participatory activities throughout the day. Also, build participant confidence to engage from the very start of the design sprint</u>
Building HCD understanding and getting into the HCD Mindsets	<u>Participants struggle to get into the mindset of a designer to support divergent thinking</u>	<u>More emphasis needs to be placed on supporting participants to step into the mindset of a designer e.g. using ideation exercises or linking HCD phases to personas to adopt</u>
	<u>The human-centred element of HCD can sometimes be lost, resulting in a standard innovation process</u>	<u>Emphasise the human-centred element of HCD through activities that support participants to truly empathise and build a picture of the underlying needs of the stakeholders, e.g. students, they are designing for</u>
	<u>Social norms and structures influence participants' HCD learning journey</u>	<u>Utilise tools to get participants comfortable with HCD mindsets, such as designing in uncertainty and that there is no judgement of bad ideas, rather than just telling participants to adopt these mindsets</u>
Developing a simplified design sprint aligned to objectives	<u>Participant thinking often didn't develop across the phases and participants struggled to link work back to previous phases</u>	<u>Given the short time frame for the design sprint, support idea development by pre-defining specific challenge statements and giving examples of more probing and open-ended questions to ask during Explore</u>

Executive Summary

Theme	Insight	Recommendation
Developing a simplified design sprint aligned to objectives	<u>Potential mismatch between programme expectations, the content and individual objectives</u>	<u>Better align HCD programme with overall Schools2030 objectives by taking participants through a simplified HCD design sprint. Also, consider supporting unique learning journeys through a competency framework</u>
	<u>Time remains a barrier to HCD learning and the implementation of innovations</u>	<u>Reduce number of phases and tools per phase to enable participants to spend more time on each activity. Also, consider adding one day to allow time to fully develop concepts and testing plans</u>
Supporting different learning styles	<u>Varied learning styles could be better supported through different teaching mechanisms</u>	<u>Consider how facilitation methods and support resources can be adapted to support different learning styles and ensure everyone is able to innovate</u>
Enabling inclusive team dynamics and improved decision-making	<u>Taking a teams-based approach has enabled participants to share ideas and expand their thinking, yet decision making remains a challenge</u>	<u>Support better team decision-making and encourage all team members to play an active role in activities and decisions</u>
	<u>CSOs can feel demotivated by the teacher-centric focus of the training and that their HCD experience isn't best utilised</u>	<u>Ensure the design sprints include challenges and examples that are inclusive for all participants. Utilise the knowledge of CSOs by encouraging them to support teachers</u>
Driving better innovation implementation	<u>The process for innovation prioritisation and evaluation can be confusing, lacks efficiencies and a clear way to assess impact</u>	<u>Further develop and iterate an improved solution evaluation tool to support impact assessment and improve evaluation efficiencies</u>
	<u>Project coordinator and Project Officer role can feel stretched, slowing down room for reflection and iteration</u>	<u>Provide facilitators with more opportunities to put HCD methodologies into practice, e.g. through HCD bootcamp. Consider ways to provide Project Coordinators and Project Officers with more time for reflection e.g. splitting the role of Project Coordinator</u>

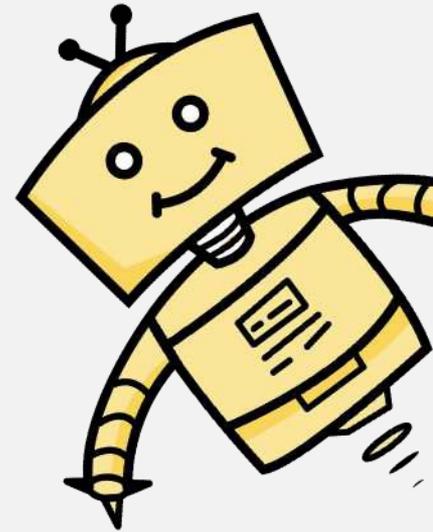
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Project Context

This section describes the main changes that were made from last year's process and the reasons behind them.



An Evolving Process

The main changes between the 2021 and 2022 process are summarised below:

From

Approach: 3 x 2-day sessions were held every 2 weeks to go through each phase.

Participation: All teachers that took part in the process were new to HCD. Each site was represented by one school leader (a head teacher or deputy head teacher) and one grade-level teacher. CSOs also had 2 representatives per site. This was the second time attending the training for CSOs

Group Setup: In Dar es Salaam and Lindi HCD sessions, teachers were grouped by location and not separated by cohorts (pre-primary, primary, and secondary). They were grouped regardless of the teaching levels. Each individual in a group was to develop an innovative idea to solve a challenge and go through the HCD process.

To

Approach: A 4-day sprint was held to run through the HCD phases. Participants will return to their sites for 3 months to continue the Make and Test phases, then return to an in-person session for the Tell Phase to showcase their process.

Participation: This year contained a mix of new and returning teachers from last year's cohorts. Sites were represented by pre-primary teachers, primary teachers and a few headteachers. CSOs now had 2-3 representatives per organisation compared to random numbers per organisation in the previous year.

Group Setup: In Dar es Salaam and Lindi HCD sessions, teachers were grouped into cohorts based on teaching levels (pre-primary and primary). Secondary teachers were separated so they will take part in a separate session focused on their new climate action module. CSOs were grouped together based on sites.

Why

Approach: To keep motivation high by accelerating the process to reach tangible results earlier in the process. To reduce the time commitment and opportunity cost for the participants.

Participation: The presence of headteachers created an imbalance of power dynamics among the teams in many sites. This affected how collaborative each site was able to be in their decision making processes. The involvement of CSO was to build stronger design teams within them with the intention that they will eventually provide (coaching) support to teachers.

Group Setup: The shift in Dar es Salaam and Lindi was based on the need for teams to have peer support within their cohort and avoid the power dynamics that arose when mixing teachers from different cohorts (pre-primary, primary, and secondary). Sharing of ideas would make the innovative process easier for the participants to build better innovations.

An Evolving Process

The main changes between the 2021 and 2022 process are summarised below:



Our approach

Key Characteristics of the field activities

ThinkPlace spent 4 days in Dar es Salaam conducting interviews and observation with teachers, Civil Society Organisation representatives, government representatives and facilitators to retrospectively assess their experience during the 4-day sprint.

ThinkPlace also spent 3 days conducting remote interviews with teachers and Civil Society Organisation representatives in Lindi to assess their experience during the 4-day sprint, and evaluate any differences or similarities in their experience to the other participants in Dar es Salaam.



Our Approach - Data Collection Tools

ThinkPlace qualitatively assessed the efficacy of the HCD process through the following methods:

INDIVIDUAL INTERVIEWS (PHYSICAL & REMOTE)



Individual interviews were conducted with all target groups during the HCD sessions (teachers, Civil Society Organisations and facilitators). Interviewers used a predetermined set of interview questions as a discussion guide.

OBSERVATION

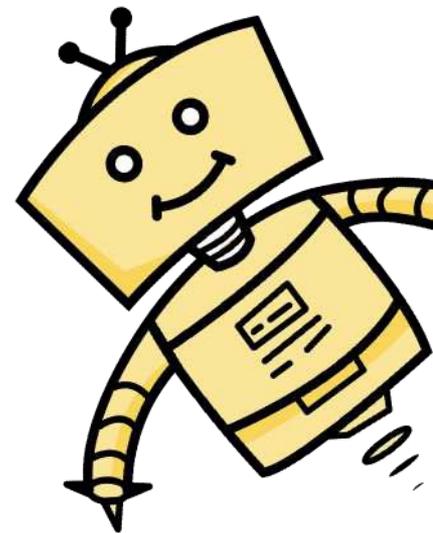


Direct observation was conducted for the Dar Es Salaam HCD design sprint. ThinkPlace observed how participants worked through the design sprint process, seeing their levels of understanding, engagement and ability to apply the HCD process.

RESEARCH TOOLS



A Toolkit Review was done to identify possible areas of improvement to the HCD toolkit, focusing on how the toolkit could be simplified and contextualized to help support participants to better understand the HCD design sprint activities. The review also explored how participants could be better supported to get into the HCD mindsets through the toolkit and other support materials.

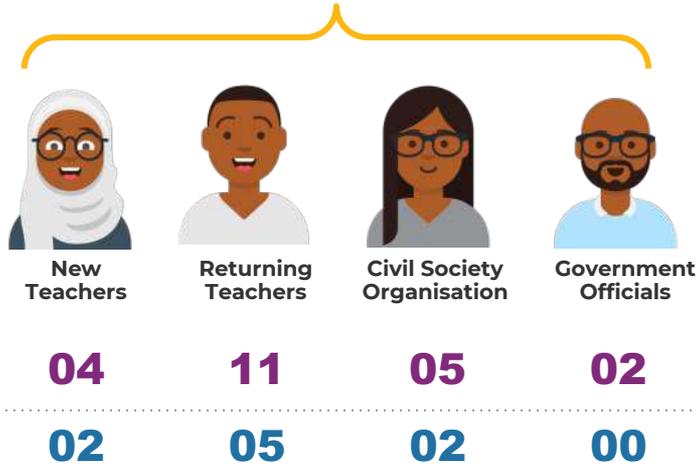


Our Approach - Sampling and Sites

Where and with whom the HCD Assessment was conducted.



HCD PARTICIPANTS



FACILITATORS



The HCD Content Learnings

This section presents learnings related to the HCD toolkit review, observations from the Dar Es Salaam design sprint and interview insights when participants were asked to discuss their experience of key HCD phases.



1. Launch

Highlights

Returning participants felt more relaxed than previous years as they knew what was coming and felt more confident in the HCD process

Challenges

- Activities involved in identifying a challenge area are complicated given the time available E.g. Smooth Sailing activity is confusing to teachers and participants struggled to link quantitative data to support identification of unique challenges
- Teacher groups landed on similar and often solution-focused challenges e.g. lack of creative learning tools. They didn't have time to dig deeper into the challenge areas and identify assumptions to test and areas they need to research further in Explore

Try this:

- Simplify 'Smooth Sailing', 'Quantitative data analysis' and problem identification into one exercise where participants are provided with a pre-defined selection of design challenges alongside supporting evidence e.g. absenteeism as a challenge with average attendance rates
- Then, ask participants to perform a mini 'desk review' of the challenges and supporting evidence. Ask participants to discuss and add evidence from their own schools to further develop their understanding of the design challenges
- The aim is to get participants to properly discuss and further explore the potential root causes underlying their design challenge so they are better prepared for Explore

2. Explore

Highlights

Interacting with students and parents helped build empathy for the people they are designing with, and some teachers even felt they can use Explore techniques to solve other school challenges

Challenges

- Many instances of leading and non-open-ended questions being asked e.g. 'Are you interested in being innovative?' 'Can you read/ write?'
- Interview questions didn't always dig deeper into the challenge area to be explored. Teachers weren't asking 'why' or probing deeper into answers
- Social desirability bias likely as children were nervous talking to teachers/ CSOs. Little was done to put children at ease

Try this:

- Simplify interview preparation guidance in toolkit
- Provide sample questions that probe into the pre-defined challenge areas to help teachers ask relevant questions, and give tips on how to build new questions to dig deeper into these challenge areas, e.g. 'tell me about a time when...' 'how do you feel about...' 'how did you do X'
- Give guidance on creating an interview setting where participants feel comfortable e.g. teachers to let children know that all their responses are anonymous, and that there are no right or wrong answers. Perform interviews in a location where children feel comfortable and aren't too visible/ audible to their peers/ teachers who may be watching over

3. Define

Highlights

Facilitators helped participants refine their HMWs and explained the need to include 'action verb, stakeholder and opportunity'

Challenges

- Limited time for a relatively complex task
- HMWs were repetitive and solution-, rather than challenge-, focused. E.g. 'HMW improve methods to teach KKK for kids to learn faster' and 'HMW get teachers innovative teaching tools'
- Participants struggled to link HMWs to insights generated during Explore, so HMWs didn't tackle problems underlying the overarching challenge area but instead re-iterated the original challenge using different terminology
- Point of view exercise was challenging for participants

Try this

- Provide examples of good quality POV and HMW statements from previous cycles of the process that address a range of learning outcomes
- Show examples of how HMWs should link to insights identified in explore, rather than re-iterate the original challenge area
- Activity where participants write down five unique problems related to their original challenge area that they identified in Explore. Ask participants to reframe the problem as a HMW. E.g. if during Explore participants identified that teachers not knowing when students are missing led to absenteeism, then a HMW could be, 'HMW support teachers to know when their students are missing'

4. Generate

Highlights

Brainstorming energised participants and enabled them to explore their own creativity and build more confidence in their ability to solve problems and generate solutions

Challenges

- Participants found it difficult to really think outside the box and generate lots of ideas
- At their core many ideas generated tended to be similar e.g. using art to support learning
- They went through the brainstorming rules, but no activities to support participants to get into the mindset of a designer
- Some participants struggled to prioritise ideas according to impact, cost and time. People wanted their own idea to be chosen

Try this

- Ensure chosen HMWs relate to 3 unique problems underlying the overarching challenge area, rather than repeats of same issue. This will help to generate more unique ideas
- Run a creativity booster exercise e.g. come up with as many ideas as possible to redesign and add functionality to a spoon. Use this to boost creativity and show how no idea is a bad idea, so the more ideas the better
- Use ideation challenges to frame thinking e.g. 1 min to think how a child would solve this
- Provide an 'Ideas Book' to show a diverse range of possible ideas to come up with, from a learning product or teaching approach, to a service-oriented solution

5. Make

Highlights

As part of the design sprint, participants were able to quickly develop low-fidelity prototypes and receive constructive feedback from facilitators immediately, rather than building an idea and then later finding out that they needed to change it

Challenges

- There was no time to iterate prototypes after receiving facilitator feedback, so participants will have to iterate in the field which may be challenging to coordinate as teams consist of participants from different schools
- It was challenging to build feasible prototypes in a short timeframe

Try this

- Take participants through a gallery walk of prototypes from previous years for inspiration
- Simplify 'Make' activities to: 1) outline key guidelines to prototyping, 2) showcase a variety of good prototypes and 3) work through the 'Selecting the Best Prototype Strategy', to help them design their prototype
- Provide participants with materials in the room to support their prototype development e.g. large sheets of drawing paper, building blocks, wire, string

6. Test

Note: There was no end-user testing during the design sprint. Role-play style testing was conducted in Lindi and teachers developed testing plans regarding assumptions to test

Highlights

Developing a testing plan in the design sprint helps guide participants for steps they need to take back at their schools

Challenges

- There was limited time to develop testing plans, so these tended to be very simple, outlining materials required and users to test with only. This doesn't fully prepare for testing
- Without research experience, it's challenging to break down prototypes into their key components and assumptions and understand the different ways to test them

Try this

- Add an extra day to the HCD programme dedicated to iterating feedback on prototypes and building out a thorough testing plan including key assumptions and components of the prototype to test, user groups to test with and testing approach
- Provide examples of how a prototype can be broken down into the key components to test e.g. a soap-making business model concept could be broken down into three key components to test: price of materials, time taken to make the soap and demand to buy soap
- Do some initial testing with a group of learners in the sprint session

Overall HCD content

Overview

The design sprint format worked well to support participants in working through the HCD content in one go and build on each phase, rather than completing the activities across a spread out timespan without direct facilitator support. This enabled facilitators to build on the content taught on each phase and see how each group developed their ideas as they progressed through the stages, providing feedback along the way. However, there still remains a lot of complex content to cover in a short space of time. The tools and toolkit could probably be simplified to a simpler set of activities with one key exercise per phase to take participants through

Key Challenges

- The toolkit is long and overly complex for individuals not used to HCD and innovating. Participants struggled to get through the number of tools/ activities in the allocated time. As a result, participants focus on quickly completing the different activities, so they don't fully understand what they are doing at each stage and why.



Simplify the design sprint activities, as per recommendations on slides 49-51

- The language used in the toolkit is not easily accessible for all individuals, in particular for participants who don't have experience in going through design processes. This is made more challenging when many participants have a low level of English, as in Tanzania, yet they are working with an English toolkit or an old Swahili version with very complicated translations.



The toolkit needs to be reviewed for complex language/ terminology to ensure definitions are provided for any terminology that may be unfamiliar to participants. Consider using bullet point summaries and shorter paragraphs of text in the toolkit, whilst simplifying the language used

These insights were found last year, and although progress has been made towards simplifying the session structure and toolkit, it still remains very complex to teachers with limited design experience. [Consider the recommendations on slides 49-51 to support simplification.](#)

Our Guiding Framework

Building on last year's assessment, ThinkPlace developed the following framework in consultations with AKF to organise the learnings and recommendations around the HCD process.



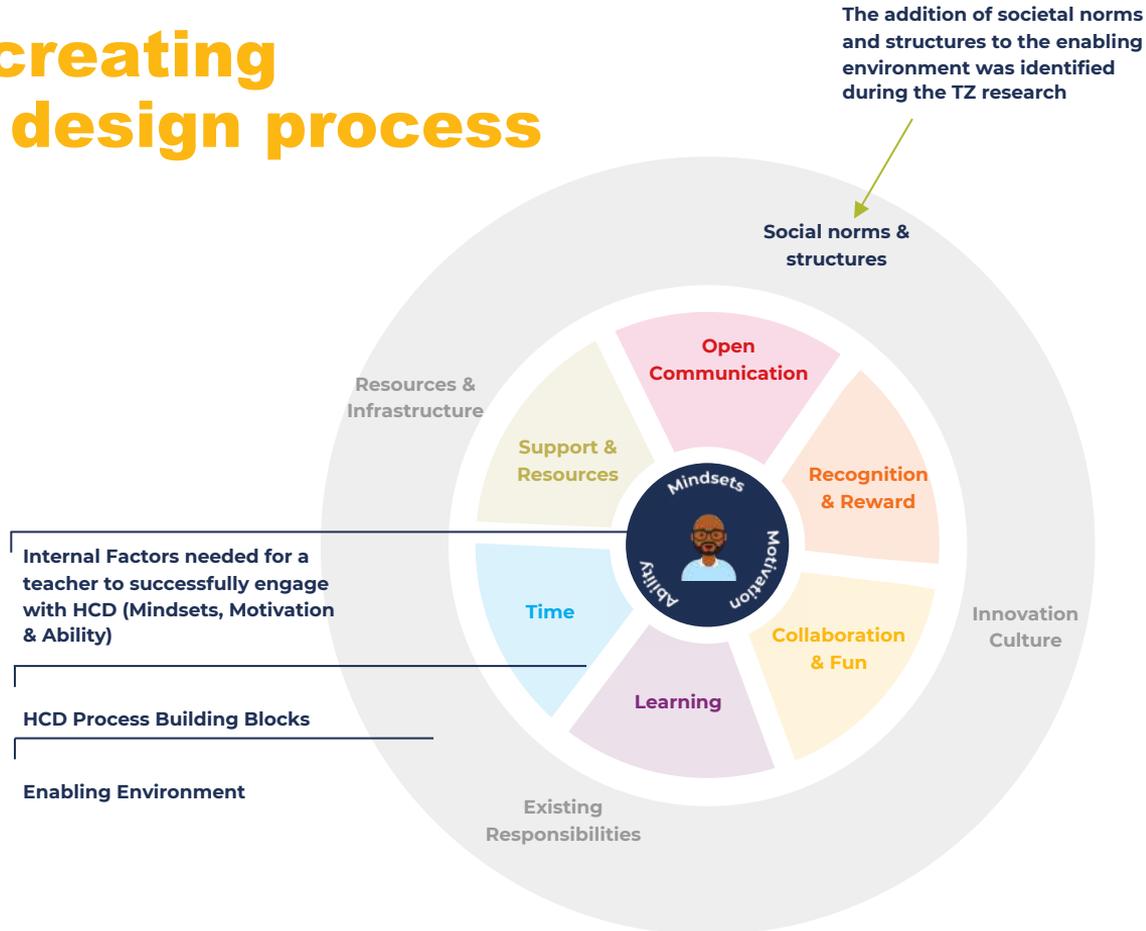
A framework for creating an effective HCD design process

Introduction to the Framework

Through the work supporting Schools2030 in Kenya, ThinkPlace developed a framework delivering an effective HCD design process. This framework helps demonstrate the key components involved in designing an HCD process and can be used to help assess the barriers and enablers to HCD learning.

In order to do this, participants must be placed in the centre. The framework is composed of three concentric circles representing three layers: 1) the internal factors that drive and enable the participant's learning, 2) the five building blocks for delivering an effective HCD process (Time, Recognition & Reward, Open Communication, Support and Resources, Collaboration and Fun, and Learning), and 3) the enabling environment that can influence participant's design journey.

The assumption is that by positively impacting these components then participants will have the capability to successfully engage with an authentic design process will arrive at innovative and impactful solutions..



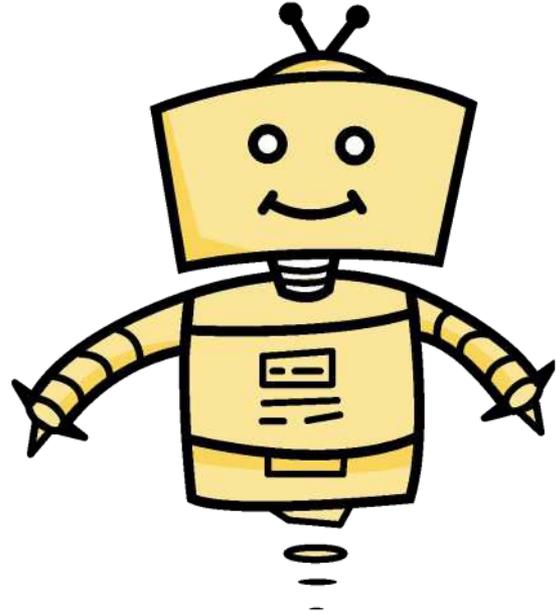
Framework Components

Internal Factors

These consist of factors that a teacher/participant needs to be able to successfully engage with and carry out HCD. At the centre of these factors (the bulls-eye), lies the core value proposition of HCD for teachers, which is yet to be co-created together with the teachers:

-  **Mindsets:** These are the HCD mindsets listed in the toolkit that are required to arrive at innovative, impactful solutions. Examples include: Put aside biases and assumptions about what you think the problem is - listen to the stakeholder; Allow yourself to think of wild ideas, and Many cycles of prototyping are necessary to develop an idea; etc.
-  **Ability:** Having the time, knowledge, and skills to be able to go through HCD.
-  **Motivation:** Having the motivation to learn about HCD during the process and practice it at the classroom level.

The selection of these internal factors were influenced by existing behaviour change frameworks, such as the Fogg Behaviour Model, which posits that an individual's behaviors are a function of their motivation, ability (how easy it is to do something) and any prompts that influence their behavior. To adapt this to Schools2030, ThinkPlace added HCD Mindsets to the set of internal factors.



Framework Components

Process Building Blocks

From the findings and evidence of the assessment of the 2021 process, ThinkPlace identified essential building blocks critical to increasing the efficacy and impact of HCD processes in Tanzania.

The building blocks represent elements of the process that Schools2030 can intentionally design to influence the internal factors of the teacher (mindsets, ability, and motivation). To an extent, these building blocks can also influence the enabling environment, but this change is expected to be much slower and long-term.

The building blocks are as follows:

-  **Time:** Do teachers perceive that the time commitment associated with the process is worth the opportunity cost?
-  **Recognition & Reward:** Are there frequent opportunities for teachers to recognise their own transformations and their work throughout the process?
-  **Open Communication:** Are there transparent lines of communication that clearly outline expectations of the process to reduce uncertainty?



Learning: Do the expectations related to HCD competency and proficiency match the activities designed for the teachers in a way that is realistic for them to achieve?



Support and Resources: Is there a dynamic fabric of support provided to address the varying and diverse needs of the teachers?



Collaboration and Fun: Does the process encourage teachers to learn from and celebrate each others' perspectives by creating a supportive community of practice? Is it enjoyable?

Framework Components

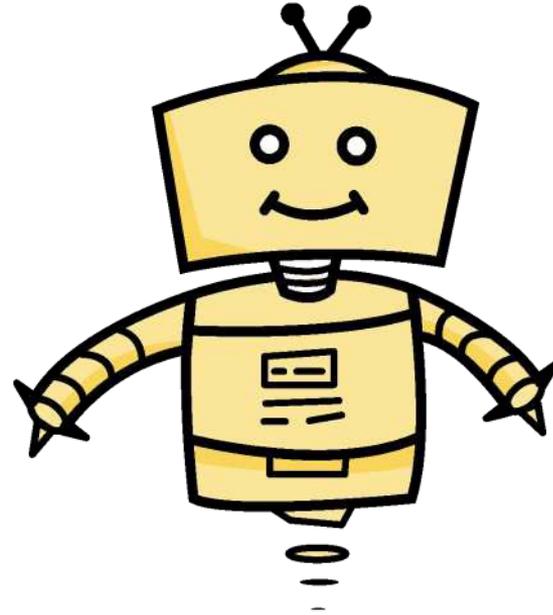
Enabling Environment

What are the conditions required for a thriving learning ecosystem that encourages bold ideas, experimentation and learning from failure?

-  **Resources and Infrastructure:** Do participants have the adequate resources and infrastructure in place to be able to readily access learning materials and communication related to the process?
-  **Innovation Culture:** What is the role of both local school leaders and leaders in the larger education system (e.g. Directors of Education) and what support do they need to create a culture of innovation and improvement?
-  **Existing Responsibilities:** What are the existing demands and pressures that teachers and partners have to deal with?
-  **NEW: Social Norms and Structures:** How do social norms and societal structures influence participants' learning journey and how they engage with the HCD design process? This component of the enabling environment has newly been added to the framework, as a result of the AKF TZ research 2022.

In the thematic learnings and recommendations sections of this report, the relevant elements of this framework will be indicated.

For each learning and recommendation in the sections to follow, the most relevant mindsets, building blocks, and enabling environment factors have been identified.



Thematic Learnings

Our key research insights are grouped by thematic areas linked to recommendations for improving the process. For each insight we have identified which of the framework components may be involved/ influence that particular insight. We have also provided a 'So what' recommendation for each insight to link to our thinking around potential recommended improvements



Thematic Learnings

Driving awareness, motivation and engagement

Key Insights

- 1. Participants gained positive benefits through application of their innovations and new skills to their day to day**
- 2. Limited awareness of the programme means new participants can't prepare in advance and could have varying expectations**
- 3. Despite positive reports on the facilitation quality there were varying engagement levels across the design sprint**

Participants gained positive benefits through application of their innovations and new skills to their day to day

Related Framework Components



Observations

- Many returning teachers were very positive about how last year's innovations had positively impacted the teaching experience in their schools e.g. Headteacher believes T-learning innovation has improved reading level of students
- Most participants felt the HCD process had helped them to better identify challenges and creatively innovate solutions at school. Some noted how their perspectives regarding their students has changed, as they now empathise better with students' challenges and understand needs may vary across individuals. They had also build an understanding that students are not just passive consumers of information, but actually learn through doing and can even provide learnings to teachers
- Some participants used HCD skills/ methods in their day to day. E.g. solving school challenges through discussions with parents, or taking a group-based activity approach to teaching rather than lecture-style teaching
- A few participants even recognised that HCD is an evolving process and that they still had more to learn, so were excited to build on these skills each year

So What?

Further encourage motivation to take part and drive engagement by highlighting different value propositions for participants and the additional benefits gained from taking part in the programme



I have become more creative after being part of the programme"

- Primary School Teacher,
Dar Es Salaam



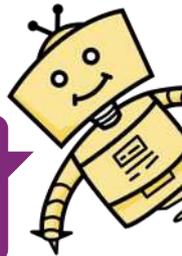
I tried to solve the challenge of absenteeism by bringing the parents to school for a discussion. I explained the challenge to the parents and then allowed them to discuss and come up with solutions... the majority idea wins"

- School Head Teacher,
Dar Es Salaam



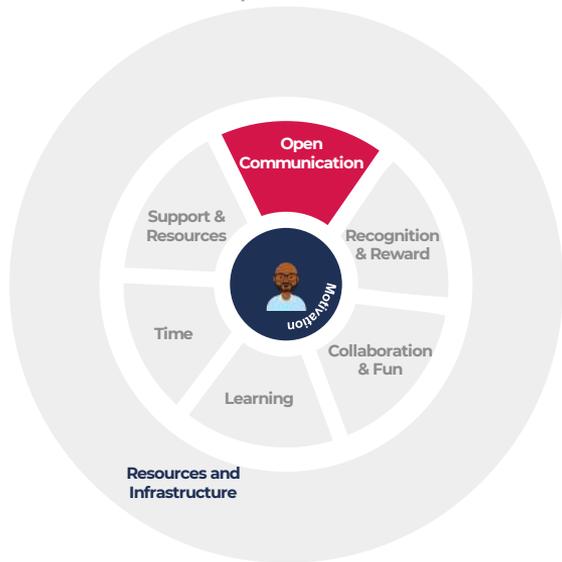
I am using HCD [at school] in understanding children's needs by applying exploration phase techniques"

- Primary School Teacher,
Dar Es Salaam



Limited awareness of the programme means new participants can't prepare in advance and could have varying expectations

Related Framework Components



Observations

- When first hearing about the programme, most participants weren't aware of what the training entailed, assuming taking part meant they would receive funding/ supplies from AKF or that the programme was somehow related to AKF's healthcare initiatives
- Participants felt communication in advance of the programme was not always shared down to attendees, so many participants only understood what it was about once they had *already* joined the workshop. However, new teachers were paired with old teachers who were encouraged to share information, so it seems a challenge lies in the passing of information between teachers. This could be improved through mechanisms to support information sharing between teachers
- This means new participants could be agreeing to take part with potentially different expectations compared to the programme objectives, and they can't prepare in advance. Schools may therefore not be choosing teachers who would be best motivated or suited to the programme. However, this will be resolved through the new sign-up approach and pre-pack

So What?

For new joiners raise awareness of HCD programme goals and outcomes ahead of the training. E.g. through a pre-pack priming them on HCD, so they can start understanding the programme objectives and process in advance



I assumed that AKF was going to help build new classrooms and buy supplies... they have a reputation as a big organisation with money"

- Primary School Teacher, Dar Es Salaam



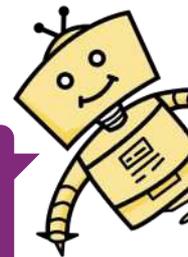
At first I felt disappointed, but I later made peace with the fact that I won't get new supplies"

- Pre-primary School Teacher, Dar Es Salaam



The headteacher came and told me that teachers for special needs pupils are needed for training at a particular place. He told me I'll get more details there"

- Pre-primary School Special Needs Teacher, Lindi



Despite positive reports on the facilitation quality there were varying engagement levels across the design sprint

Recurring Insight

Related Framework Components



Observations

- The overall feedback regarding the facilitation quality was very positive and participants appreciated the greater emphasis on practical activities brought about from the design sprint approach. Facilitators used methods to bring participants attention back to the room and keep the content engaging
- However, there was still very passive participation from many participants. They hardly put their hands up to answer questions, so facilitators had to pick out individuals to answer and there were some instances where some participants were actually dozing off during sessions and going on their phones
- At times, the training can feel a bit like a classroom with facilitators calling on participants to answer questions and the explanations of some phases taking a verbal, lecture-style approach. This is likely to result in reduced focus without supporting visual prompts to guide participants' attention

So What?

Continue to make facilitation more engaging by including energisers and participatory activities throughout the day. Also, build participant confidence to engage from the very start of the design sprint

“

It would be good to have the presentation slides always displayed so that it becomes easy to read while listening to the teacher and also as a reference”

- Primary School Teacher,
Dar Es Salaam

“

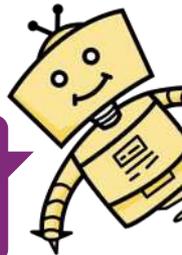
AKF should make the sessions less like a classroom... It feels like going to school to learn”

- CSO Representative,
Dar Es Salaam

“

HCD is complicated. I feel someone can only truly understand it through trying it out practically”

- Facilitator,
Dar Es Salaam



Thematic Learnings

Building HCD understanding and getting into the HCD Mindsets

Key Insights

- 1. Participants struggle to get into the mindset of a designer to support divergent thinking**
- 2. The human-centred element of HCD can sometimes be lost, resulting in a standard innovation process**
- 3. Societal norms and structures influence participants' HCD learning journey**

Participants struggle to get into the mindset of a designer to support divergent thinking

Related Framework Components



Observations

- During divergent thinking phases, such as Explore and Generate, participants found it challenging to come up with unique ideas and questions. Many of their ideas were repetitive or lacked creativity so were ultimately similar at their core e.g. A few groups had 'art' as an idea for a creative learning tool, but were not able to state how art would be used. Was it painting, music, drama etc?
- Facilitators did support divergent thinking by sharing dos and don'ts e.g. encouraging participants to think outside of the box and have an open mind. However, participants still struggled to think outside of the current constraints. We noted that no examples of 'out of the box' ideas were given and there were no activities to prompt general creativity
- The traditional Tanzanian education system tends to focus more on rote learning of information rather than coming up with creative answers or critical analysis, so adopting a divergent thinking mindset may be unfamiliar
- For teachers, their jobs teach that there are right v.s. wrong answers to problems. This contradicts the HCD mindset of 'no idea is a bad idea', which is essential to promote a range of ideas during the Generate phase

So What?

More emphasis needs to be placed on supporting participants to step into the mindset of a designer e.g. using ideation exercises or linking HCD phases to personas to adopt



Explore was hard.. The teachers [we interviewed] didn't want to admit that they were having issues teaching... they felt like I am offending them"

- Primary Teacher, Lindi



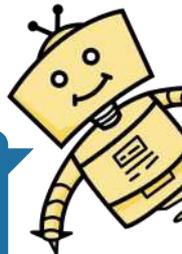
I found it difficult to develop a prototype because I didn't know where to start and where to stop"

- Pre-primary teacher, Lindi



Teachers can think of ideas but they struggle to capture or write ideas because they're not writers."

- School Head Teacher, Dar Es Salaam



The human-centred element of HCD can sometimes be lost, resulting in a standard innovation process

Related Framework Components



Observations

- There was variation in the understanding of what HCD is across participants and facilitators. Many participants conflated HCD with a standard innovation process that develops learning tools, and one even thought HCD was an organisation bringing people together for innovation
- The core element of HCD as a problem-solving technique which focuses on putting the end user at the heart of the process, was not understood by all participants. Without a strong grasp of the *human-centred* mindset that is essential to the process, teachers were innovating and coming up with creative learning tools, however these solutions were not always solving the specific needs of the end users i.e. students
- Although Explore helped teachers to begin to empathise with students/ parents, the questions they were asking did not really probe into understanding the core needs and underlying experiences and challenges of the end users
- Participants found the Point of View exercise challenging and did not have much time to build a clear picture of their stakeholders' needs and challenges

So What?

Emphasise the human-centred element of HCD through activities that support participants to truly empathise and build a picture of the underlying needs of the stakeholders, e.g. students, they are designing for



HCD is looking at challenges within schools and coming up with solutions”

- Pre-primary Teacher, Lindi



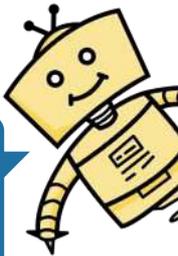
HCD is a programme that seeks to help teachers to be innovative in education to help pupils learn better”

- Pre-primary teacher, Lindi



I thought HCD was an organisation that brings people together to design solutions”

- Pre-primary teacher, Dar Es Salaam



Social norms and structures influence participants' HCD learning journey

Related Framework Components



Observations

- Some elements of an HCD mindset are challenging to adopt (e.g. being comfortable in uncertainty and that there should be no judgement of bad ideas), in particular when they go against common social norms/ structures
- Societal hierarchies between teachers and students can make it harder to step into the shoes of students during the design process. Societal structures also lead to teachers feeling they must follow direction from the top, which doesn't always allow them space to innovate and test
- The social norm of needing to get things right from the start leads to a fear of being wrong. This type of thinking exists in the Tanzanian education system and can limit desire for experimentation and risk-taking. This presented itself as participants were reluctant to proactively answer questions if they didn't know the answer already and were hesitant to come up with solutions that may be rejected. We hypothesise that this may have influenced the approaches taken during 'Explore' as teachers tended to ask questions with yes or no answers e.g. 'can you read and write', rather than more open-ended questions e.g. 'how do you feel about reading?'

So What?

Utilise tools to get participants comfortable with HCD mindsets, such as designing in uncertainty and that there is no judgement of bad ideas, rather than just telling participants to adopt these mindsets

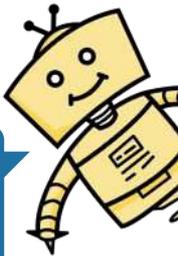


It is hard for students to understand the purpose of the interviews we do during the Explore Phase"

- Primary Teacher, Dar es Salaam

Example of societal structures

- At one school, during Explore, students appeared very nervous to take part in interviews, and teachers were approaching the interviews as if in a classroom, picking on students to answer questions in front of the class



Thematic Learnings

Developing a simplified design sprint aligned to objectives

Key Insights

- 1. Participant thinking often didn't develop across the phases and participants struggled to link work back to previous phases**
- 2. Potential mismatch between programme expectations, the content and individual objectives**
- 3. Time remains a barrier to HCD learning and the implementation of innovations**

Participant thinking didn't always develop across the phases and participants struggled to link work back to previous phases

Recurring Insight

Related Framework Components



Observations

- As they progressed through the HCD phases, participants' challenge areas and ideas tended to remain similar, rather than digging deeper into the problem and building on the outputs of the previous phase. For example, for most teacher groups the original challenge was the absence of innovative or creative tools in learning and teaching. Post Explore, their HMWs remained similar to the original challenge statement e.g. 'HMW help teachers to get innovative tools for learning and teaching', or 'HMW improve teaching tools to allow students to learn'
- Facilitators did remind and encourage participants to link each phase to the previous phase, e.g. facilitators encouraged participants to link their HMW statements to their Explore insights. However, participants were often not applying this guidance from facilitators which suggests they found it difficult to do so
- Despite the fact that facilitators told participants to develop HMWs containing an 'action, stakeholder and opportunity', participants often weren't doing so

So What?

Given the short time frame for the design sprint, support idea development by pre-defining specific challenge statements and giving examples of more probing and open-ended questions to ask during Explore

“

The participants are struggling to link their ideas back to what they heard in the field during exploration and also linking their ideas to other phases”

**- Facilitator,
Dar es Salaam**

“

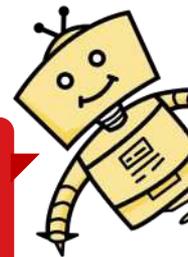
I don't think we need to waste time coming up with HMWs and refining them.”

**- Pre-Primary Teacher,
Dar es Salaam**

“

The HMW stage is very challenging. When we are brainstorming different ideas, it brings conflict because everybody feels their idea is the best.”

**- Primary Teacher,
Dar es Salaam**



Potential mismatch between programme expectations, the content and individual objectives

Related Framework Components



Observations

- The training tries to simultaneously take teachers through a design sprint to come up with learning tools, whilst also trying to upskill them in HCD methodology. As this is a lot to cover in a 4 day design sprint, participants sometimes struggle to truly understand HCD and get into the HCD mindsets. Participants were confused by the number of tools and purpose of each tool, often unable to remember the sequence of activities they had done
- The volume and complexity of material in the toolkit is better suited to someone with an existing grasp and experience of HCD, with time to work through a number of activities. For the purpose of facilitating teachers in designing new learning tools, a simpler design sprint structure and tools could be used
- Different teachers have different objectives for what they want to achieve through the HCD programme and different capabilities. Some teachers may be better suited to further building their HCD skills. Using a competency framework could help identify learning goals and measure teacher development to identify teachers who should progress further in their HCD learning

So What?

Better align HCD programme with overall Schools2030 objectives by taking participants through a simplified HCD design sprint. Also, consider supporting unique learning journeys through a competency framework

“

I'm not sure of the exact HCD process... I require more training... The topics are very confusing because there are many phases”

- Pre-primary teacher, Lindi

“

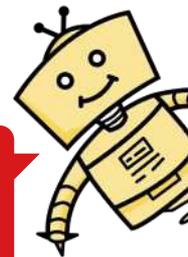
Aaah I can't remember the phases”

- CSO, Dar Es Salaam

“

I felt that the facilitators don't understand the process well themselves to be able to explain it in an easier way”

- Primary teacher, Lindi



Time remains a barrier to HCD learning and the implementation of innovations

Recurring Insight

Related Framework Components



Observations

- Despite taking a sprint-based approach this year, many participants still felt the sessions were rushed and were concerned they weren't going to get to fully developed concepts and testing plans before leaving. E.g. due to timing, groups had to move on to 'Generate' without fully refining their HMWs. Additional sessions from external organisations also took away time from the core design sprint activities
- However, some participants that were coming back for their 2nd/3rd time felt less rushed as they found it easier as they are already familiar with HCD
- Participants and facilitators felt there are too many tools to go through during the design sprint and that some phases could even be combined
- Some participants felt more could be done to make it easier for them to attend the programme and remove distractions e.g. participants staying in a hotel so they don't spend time travelling home and don't get distracted by home/ work stresses

So What?

Reduce number of phases and tools per phase to enable participants to spend more time on each activity. Also, consider adding one day to allow time to fully develop concepts and testing plans

“

The time provided to do activities during the workshop is not adequate. We are not experts so it takes us a bit of time to understand, discuss and agree on what we are supposed to do”

- CSO Representative,
Dar Es Salaam

“

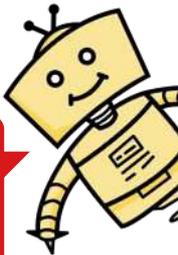
This time it was better in terms of time. It was a short time, but a lot of lessons learned”

- CSO Representative,
Lindi

“

Time to do the exercises needs to be increased because everything seems to be rushed”

- Pre-Primary Teacher,
Lindi



Thematic Learnings

Supporting different learning styles

Key Insights

1. Varied learning styles could be better supported through different teaching mechanisms

Varied learning styles could be better supported through different teaching mechanisms

Related Framework Components



Observations

- The design sprint combined a mixture of lecture-based teaching and explanations of HCD activities, alongside practical exercises. To drive participant engagement, facilitators posed questions to participants and used group and individual-based activities
- However, the VARK model outlines four learning styles: visual, auditory, read/ write and kinaesthetic. As there were not many visual cues, e.g. simple presentations to support verbal content, visual learners may have been struggling to keep up which could explain some of the low engagement observed
- While it may not be the case that learners necessarily sit within one particular learning style, it is known that some learners engage better with different types of learning and a varied mix of learning styles can support better engagement. Modifying the facilitation methods and supporting resources could help support varied learning styles drive better learning
- New teachers sometimes found it difficult to keep up with those already familiar with HCD

So What?

Consider how facilitation methods and supporting resources can be adapted to support different learning styles and ensure everyone is able to innovate



Learning should be more practical, so that even those who are struggling to read can engage in learning”

- Primary School Teacher, Dar Es Salaam



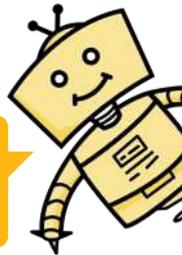
There should be a projector to display the training slides”

- CSO, Lindi



When having these trainings, don't mix teachers with different levels of understanding together because it causes other teachers to feel like they are not good enough to innovate”

- CSO, Lindi



Thematic Learnings

Enabling inclusive team dynamics and improved decision-making

Key Insights

- 1. Taking a teams-based approach has enabled participants to share ideas and expand their thinking, yet decision making remains a challenge**
- 2. CSOs can feel demotivated by the teacher-centric focus of the training and that their HCD experience isn't best utilised**

Taking a teams-based approach has enabled participants to share ideas and expand their thinking, yet decision making remains a challenge

Recurring Insight

Related Framework Components



Observations

- This year, as per last year's recommendations, participants were grouped into teams according to their level e.g. pre-primary, primary and CSO. Participants found this enabled them to learn from each other's ideas and experiences, as well as understand better the challenges faced by other schools in their area
- However, we observed some participants, often the team leader, being much more active than others, with other team members not paying attention at all
- Some groups found it challenging to make decisions as a group, in particular during Define and Generate when deciding which solution to prioritise. Participants felt that even though they were addressing the same challenge, contextual differences meant that solutions suggested by others may not work in their setting
- Some participants also found it frustrating that their team members, in particular those who were new to HCD, were slow to pick up concepts so they had to work at a slower pace for them

So What?

Support better team decision-making and encourage all team members to play an active role in activities and decisions



It is good working as a team because people come with different experiences and ideas can be shared"

- CSO, Lindi



When brainstorming, having different ideas brings conflict when everyone feels their idea is correct"

- CSO, Dar Es Salaam



Some team members are slow in processing some of the information therefore slowing down the other team members."

- Primary teacher Dar Es Salaam



CSOs can feel demotivated by the teacher-centric focus of the training and that their HCD experience isn't best utilised

Related Framework Components



Observations

- CSOs felt the design sprint had a teacher-centric focus with most of the language and examples being centred around school/ teacher-related use cases that don't always apply to them. CSOs noted how teachers and CSOs have different professional 'languages', so it can be hard to understand the contexts or solutions being described by one another
- One CSO felt left behind as they thought that CSOs weren't invited to the global showcase, however in fact 2 CSOs did present at the showcase so there seems to have been a communication issue around the showcase
- Some CSOs felt like a dormant resource. They feel they have more HCD experience than most of the teachers, but felt their knowledge/ experience wasn't being utilised in the workshops. However, it was noted that CSOs did not always understand the activities and sometimes benefitted from support of teachers
- These insights could contribute to why we observed that CSOs were not always focused during the design sprint

So What?

Ensure the design sprints include challenges and examples that are inclusive for all participants. Utilise the knowledge of CSOs by encouraging them to support teachers



It's not okay to include us in the process but then leave us behind"

- CSO,
Dar Es Salaam



There was a global showcase of the innovations participants created and none of us was invited. We felt used for AKF's benefit" – however 2 CSOs were present so this seems to be a communication issue

- CSO,
Dar Es Salaam



We were trained to be trainers but we have not been given the opportunity to train." – however facilitators noted they were not actually trained to be trainers. This is a misunderstanding of some CSOs

- CSO Lindi



Thematic Learnings

Driving better innovation implementation

Key Insights

1. The process for innovation prioritisation and evaluation can be confusing, lacks efficiencies and a clear way to assess impact
2. Project Coordinator and Project Officer role can feel stretched, slowing down room for reflection and iteration

The process for innovation prioritisation and evaluation can be confusing, lacks efficiencies and a clear way to assess impact

Related Framework Components



Observations

- Some groups found it difficult to prioritise an innovation to pursue. E.g. during the 'Sorting for Selection' activity, a group in Dar equated higher cost and effort, with higher impact, failing to understand why they should prioritise the low cost, low effort ideas
- Several participants were unclear what would happen next once they left the design sprint. They weren't sure how they were going to implement and evaluate their innovations at their schools
- The process for evaluating innovations at schools lacks efficiencies as POs have to travel to each school to support them with filling in their solution evaluation forms. This takes time and could potentially be managed remotely, or through teachers coming to one central location to work on this together
- The solution evaluation tool is based on a relatively long list of criteria that are based on self-assessments. Simpler criteria, with clearer definitions and approaches to measuring these criteria could support easier evaluations

So What?

Further develop and iterate an improved solution evaluation tool/ mechanism to support impact assessment and make the evaluation process more efficient

“

AKF does training but does not tell us what is supposed to happen next. There is no workplan”

- CSO,
Dar Es Salaam

“

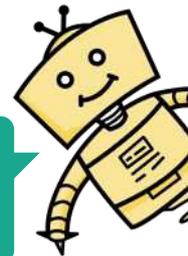
The problem with the project is that when we started we were not told what the outcome should be. We develop innovations and they work well. But we are not told what should happen next in terms of scaling of the innovation”

- CSO, Lindi

“

The participants are struggling to know if an innovation works and how to test the viability”

- Facilitator,
Dar Es Salaam



Project Coordinator and Project Officer role can feel stretched, slowing down room for reflection and iteration

Related Framework Components



Observations

- Facilitators are still learning HCD themselves and feel as they are not HCD experts they are balancing their own HCD learning, whilst also upskilling others. While they have strong expertise in facilitation and a good understanding of the AKF HCD process, they have not had as many opportunities to put HCD into practice and further develop their HCD expertise. They will be attending an HCD bootcamp to help empower them to become HCD coaches
- Managing the role of Project Coordinator at the same time as working as a facilitator can feel like a lot of work for one person to manage
- In their role as Project Officers, the facilitators have a large number of schools to oversee and the innovation monitoring and evaluation process takes time. Facilitators feel they need a more defined and efficient approach to evaluating the impact of learning tool innovations at schools to help them manage the number of learning innovations they need to oversee. Whilst it's expected this will be easier this year due to the lower number of innovations as a result of the team—based approach, improvements can still be made to innovation evaluation

So What?

Provide facilitators with more opportunities to put HCD methodologies into practice, e.g. through HCD bootcamp. Consider ways to provide Project Coordinators and Project Officers with more time for reflection e.g. splitting the role of Project Coordinator and facilitator

“

I'm not an HCD expert, I just understand the process... Some people stay in college for a year to learn HCD”

Facilitator, Dar Es Salaam

“

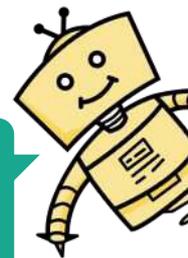
Balancing facilitator role and coordinator is a lot... If could step away to advise other facilitators it would be easier”

- Facilitator, Dar Es Salaam

“

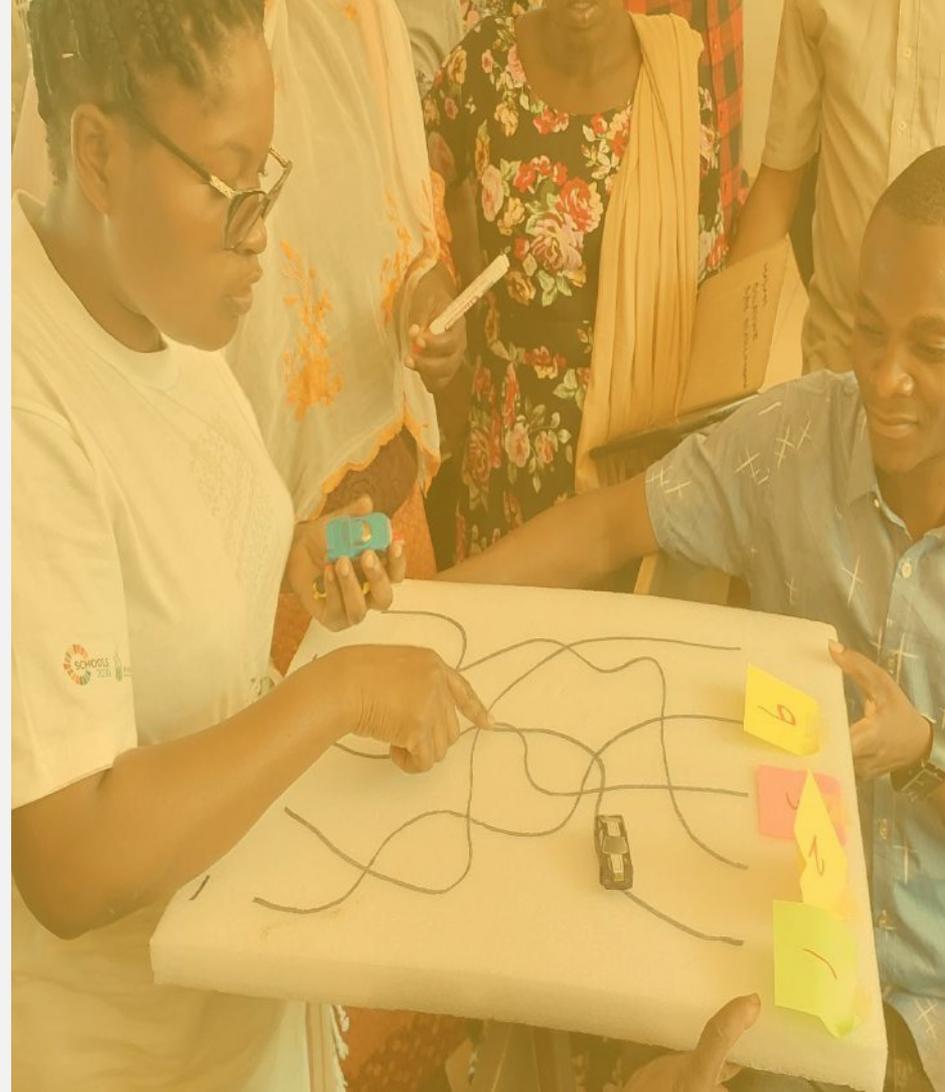
There are only three POs to support implementation... It takes time to support teachers to capture data about their solution and review their forms... We need a mechanism to make this easier”

- Facilitator, Dar Es Salaam



Recommendations

Our recommendations linked to our thematic learnings and components of the HCD learning framework that will be impacted through implementing the recommendation



Driving awareness, motivation and engagement

IMPACTS

Motivation

Mindsets

BUILDING BLOCKS

Learning

Recognition & Reward

ENABLING ENVIRONMENT

Existing Responsibilities

1. *Further encourage motivation to take part and drive engagement by highlighting different value propositions for participants and the additional benefits gained from taking part in the programme*

Suggestions to do this:

- **Showcase different value propositions:** Build motivation to take part in the programme by highlighting some of the additional value propositions/ benefits for participants. The different value propositions can be co-created with previous participants to understand more about what they seek to get out of the programme, as well as what additional benefits they experienced. For example, learning something new, being seen as an innovator, professional development, solving problems within the school, identifying and understanding challenges, etc.
- **The 'Before and after' HCD teacher/ CSO:** To inspire participants around what they will gain from taking part in the HCD process, consider developing personas which bring to life the 'Before and after' HCD teacher. E.g. the 'Before' teacher encourages rote learning and disciplines their students. The 'After' teacher uses play and engages with their students. This will also help support participants to understand the types of HCD mindsets they need to adopt and get into.

Driving awareness, motivation and engagement

IMPACTS

Motivation

BUILDING BLOCKS

Open Communication

Collaboration & Fun

Support

ENABLING ENVIRONMENT

Existing Responsibilities

Innovation Culture

2. *For new joiners raise awareness of HCD programme goals and outcomes ahead of the training. E.g. through a pre-pack priming them on HCD, so they can start understanding the programme objectives and process in advance*

Suggestions to do this:

- **Design of pre-pack materials 'primer':** This is already being planned off the back of insights from the AKF Kenya Schools 2030 assessment. This will help raise participant awareness and motivation ahead of choosing to take part in the programme, as per the new demand-driven application model
 - **Additional Considerations:** Consider the different formats that this pre-pack could be shared in to suit different learning styles. For example video/ audio format, plus written
- **Opt-in application process:** Evidence shows that TPD opportunities in which teachers opt into programs are substantially more effective than those that mandate teachers' participation (Kennedy 2016). A demand-driven application page is being developed for Kenya Schools2030: consider the same approach for Tanzania.

3. *Continue to make facilitation more engaging by including energisers and participatory activities throughout the day. Also, build participant confidence to engage from the very start of the design sprint*

Suggestions to do this:

- **Facilitator guide:** Consider developing a facilitator guide which helps guide facilitators through key HCD activities and facilitation methods to engage participants. This should include facilitator key notes and teaching tips, as well as providing suggested engagement activities
- **Positive reinforcement:** When participants answer questions or engage proactively, practice positive reinforcement of their ideas and contribution to encourage others to have the confidence to speak up

Building understanding of HCD and getting into the HCD mindsets

IMPACTS

Mindsets

Motivation

BUILDING BLOCKS

Learning

Collaboration & Fun

ENABLING ENVIRONMENT

Innovation Culture

1. **More emphasis needs to be placed on supporting participants to step into the mindset of a designer e.g. using ideation exercises or linking HCD phases to personas to adopt**

Suggestions to do this:

- **Ideation exercises:**

- Use warm-up ideation exercises throughout the design sprint to encourage more creative thinking and get participants to think outside of the box. E.g. *Spoon ideation*: Give participants 2 minutes to come up with as many ideas as possible to improve the functionality of a spoon. Encourage wild ideas, such as a spoon where the handle also works as a straw, or a spoon which plays music to work as a speaker
- During Generate, use ideation challenges to encourage participants to think about their challenge from different perspectives and therefore come up with a broader range of ideas. For example, '*Challenger Brands*' exercise- participants have to imagine they work for a different business e.g. Uber. Then they think 'if I was in charge of Uber, how would I solve this problem?', or '*I'm not me*' – participant is given a persona, e.g. a student with a broken arm, and imagine they are that persona. They then have to come up with as many ideas as possible from the perspective of that persona

- **Persona based phases:** Develop a persona per HCD phase, with different characteristics of the persona that highlight the different ways participants should think in each phase. Provide an activity to encourage participants to leave behind their usual ways of thinking and step into the mindset of how that persona would work through the HCD activities. E.g. During Generate, a 'The Artist' persona could be used, that embodies creativity and free-thinking without constraints which is required for Generate

- This links in with suggestions made during the 'Try this' section of the Explore phase HCD content learnings section of the report

Building understanding of HCD and getting into the HCD mindsets

IMPACTS

Mindsets

Motivation

BUILDING BLOCKS

Learning

Collaboration & Fun

ENABLING ENVIRONMENT

Innovation Culture

Social Norms and Structures

2. *Emphasise the human-centred element of HCD through activities that support participants to truly empathise and build a picture of the underlying needs of the stakeholders, e.g. students, they are designing for*

Suggestions to do this:

- **Ice-breaker empathy exercise:** At the start of the Explore phase, use a role play empathy activity to encourage participants to step into the shoes of another person. Give participants a persona e.g. visually impaired student. Participants have to imagine going through an activity as if they are that persona, considering the needs and challenges that they may face
- **Videos as a mechanism to encourage empathetic discussions:** Pre-record videos of interviews with students and parents. Play clips of the recorded interviews to participants. The participants should discuss what they have heard and work as a group to come up with key interview insights. Encourage participants to really think through how the interviewee may have felt during the interview and the wider context that may have led to their interview answers

3. *Utilise tools to get participants comfortable with HCD mindsets, such as designing in uncertainty and that there is no judgement of bad ideas, rather than just telling participants to adopt these mindsets*

Suggestions to do this:

- **An open, non-judgemental environment for innovation:** Encourage participants to relax, have fun and get into HCD mindsets that may at first feel unnatural. At the start of the design sprint, facilitators should talk through the key HCD mindsets and give examples to bring them to life e.g. showing the design process as a chaotic mess of ambiguity until there is clarity at the end, to help participants feel at ease with the feeling of ambiguity throughout the design sprint. Throughout the design sprint, facilitators could periodically include icebreakers and energisers that encourage participants to break free from their usual ways of thinking and step into the mindset of a designer

Developing a simplified design sprint aligned to objectives

IMPACTS

Ability

BUILDING BLOCKS

Learning

Support

ENABLING ENVIRONMENT

Existing Responsibilities

Resources & Infrastructure

- Given the short time frame for the design sprint, support idea development by pre-defining specific challenge statements during the pre-pack and giving examples of more probing and open-ended questions to ask during Explore

Suggestions to do this:

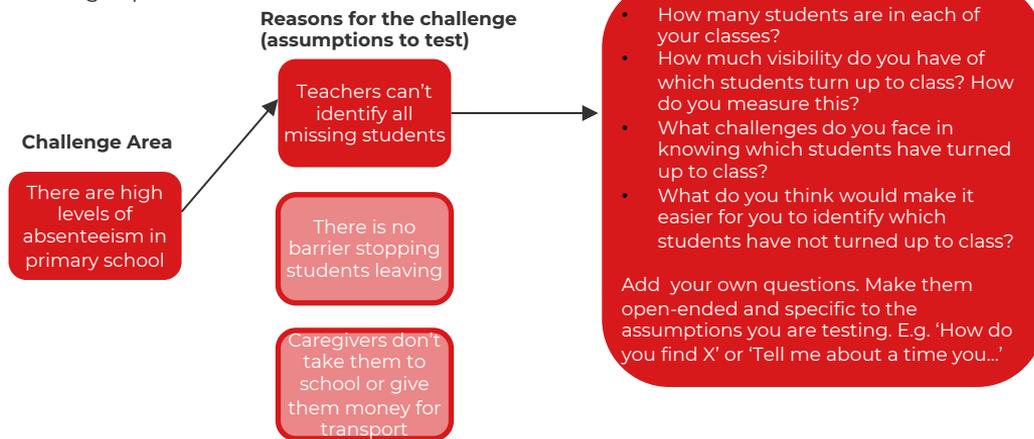
- Simplify Launch-Define phases through pre-defined probes to support idea development:

Launch

Pre-define a set of challenge areas and reasons for this challenge during the pre-pack. Ask participants to discuss their experience of the challenge in their school. Encourage them to add reasons for the challenge based on their experience-these will form the assumptions to test and probe deeper into during Explore

Explore

Provide a pre-defined list of example questions that probe into the challenge area and sub-topics to help guide participants to test their assumptions and dig deeper into the specific challenge area. Give ideas for how to ask more specific probing questions



Developing a simplified design sprint aligned to objectives

IMPACTS

Mindsets

Ability

BUILDING BLOCKS

Learning

Support

Recognition & Reward

ENABLING ENVIRONMENT

Existing Responsibilities

Resources & Infrastructure

2. *Better align HCD programme with overall Schools2030 objectives by taking participants through a simplified HCD design sprint. Also, consider supporting unique learning journeys through a competency framework*

Suggestions to do this:

- Principles-based HCD learning:** If the overall objective of the programme is to support participants in designing new learning innovation tools rather than upskilling them to become HCD experts, consider simplifying the HCD design sprint structure. This can be done by teaching HCD through a simplified 'HCD principles and mindsets' design sprint approach:
 1. At the start of the design sprint, run a 3 hour session focused on the HCD principles and mindsets, rather than teaching HCD as a complex set of phases and tools. Run activities based around encouraging empathy and creativity, and how to deal with uncertainty during the design process
 2. Simplify the HCD phases and toolkits to provide a one-pager per HCD phase. For each phase, outline the mindset that the participant needs to adopt and 1 key activity to work through
- Varied learning journeys for different participants:** Participant objectives and natural competencies will vary. For some, simply taking part in a design sprint to design innovative learning solutions may be enough, whereas others may want to continue their design journeys. They can be provided with more options to develop their skills further and take their impact to the next level
 - Competency framework:** Develop a competency framework that outlines the key HCD competencies. The competency framework should outline how to measure participants' journey from beginner to mastery for each competency. This will help to identify participants who have stronger HCD competencies, and therefore may be better suited to build their HCD skills further. Additional HCD training could be considered for participants who want and are able to further build their HCD skills

Developing a simplified design sprint aligned to objectives

IMPACTS

Mindsets

Ability

BUILDING BLOCKS

Learning

Support

Time

ENABLING ENVIRONMENT

Existing Responsibilities

Resources & Infrastructure

3. *Reduce number of phases and tools per phase to enable participants to spend more time on each activity. Also, consider adding one day to allow time to fully develop concepts and testing plans*

Suggestions to do this:

- **Simplification of the design sprint:** As suggested in the previous 2 slides, consider simplifying the design sprint by reducing the number of tools per phase and using a 'principles-based' approach to teaching HCD. Design a one-pager per phase with the key mindsets required and one activity per phase, with prompts to help develop participant thinking
- **A day for iteration:** Enable participants to test their ideas in a 'petri-dish' environment by adding an extra day to the design sprint where participants can iterate on their ideas as a group, and perhaps carry out some testing in a safe and controlled environment. This day could occur a couple of weeks after the 4-day design sprint, to allow participants the time to reflect on their ideas and even conduct early desirability testing at their schools/ organisations
- **Testing in a safe and controlled environment:** As suggested in the AKF Kenya 2022 report, a group of students and other stakeholders could even be brought in to the 'iteration day' to enable participants to test prototypes directly with stakeholders in a safe environment. Even though these stakeholders may not be from the same location as some of the teachers, this will still help build participants confidence and capability when it comes to knowing how to test and iterate

Supporting different learning styles

IMPACTS

Ability

Motivation

BUILDING BLOCKS

Learning

Support

ENABLING ENVIRONMENT

Existing Responsibilities

Resources & Infrastructure

1. Consider how facilitation methods and support resources can be adapted to support different learning styles and ensure everyone is able to innovate

Suggestions to do this:

- **Visual tools to support learning:** Currently, explanations of HCD and the toolkit activities is being taught verbally with the support of the toolkit, which can be difficult for participants to follow. To help all types of learner, consider having visual tools, e.g. Powerpoint presentations, that visualise key points. To further drive engagement, consider having videos showing how to get into HCD mindsets and how activities were conducted in previous years.
- **Supporting kinaesthetic learners and general engagement:** Consider giving each team an area of the room with their own flip chart and set of post-its. Print out the key steps for each toolkit activity onto A3 paper- participants should be encouraged to work on these A3 activity worksheets and flip charts, rather than sitting down and filling in the printed A4 toolkit
- **Support learning outside of the design sprint setting:** As suggested in the AKF Kenya 2022 report, consider developing open-source design thinking learning materials to enable participants outside of the programme to go through the design sprint process in their own time:
 - Provide open-source materials and timelines for those who are not officially enrolled in the process to go through it and submit MVPs. This can be a way to gauge how interested the wider education community is in design thinking, but also allow for greater participation
 - Develop a set of cards or a mini dictionary with bitesize information on the activities during each phase of the HCD process
 - Develop an audio/ video guide which takes learners through the key activities and HCD mindsets, to support learning in their own time and supports participants through key 'Test' and 'Iterate' phases that they need to conduct at their own schools/ organisations

Enabling inclusive team dynamics and improved decision-making

IMPACTS

Motivation

BUILDING BLOCKS

Collaboration & Fun

Support

Recognition & Reward

ENABLING ENVIRONMENT

Existing Responsibilities

Social Norms and Structures

1. *Support better team decision-making and encourage all team members to play an active role in activities and decisions*

Suggestions to do this:

- **Team building from the start:** Consider exercises to bring teams together so that they better understand each others' strengths, weaknesses and what roles/ ways of working they need to commit to. E.g., **team contract exercise-** Team members could come up with ways of working that will form their 'team contract' that they all have to sign. E.g. 'If I have an idea, I will share it with the team' and 'When someone shares an idea, I will listen and encourage their participation, as no idea is a bad idea'
- **Decision-making support:** To help teams make better decisions and encourage team members to agree on the best innovation idea, rather than remaining attached to their own idea, provide clear rationales behind the prioritisation criteria in the toolkit. Also, consider 'spot voting' if participants can't decide between 2 ideas- everyone is given 1 anonymous vote, and you can't vote for your own idea

2. *Ensure the design sprints include challenges and examples that are inclusive for all participants. Utilise the knowledge of CSOs by encouraging them to support teachers*

Suggestions to do this:

- **Inclusive and tailored:** Help ensure everyone feels part of the programme by ensuring examples provided in activities are relevant to all and not just specific to teachers. Could even consider having tailored comms as part of the application package and pre-pack information, highlighting unique value propositions for teachers v.s. CSOs
- **Utilise the HCD capability of CSOs:** As CSOs have greater HCD experience, and potentially more time to utilise HCD in their day to day, consider encouraging CSOs to provide additional support to teachers or running a CSO-only design sprint where they build further on their HCD skills

Driving better innovation implementation

IMPACTS

Mindsets

BUILDING BLOCKS

Learning

Support

Open Communication

ENABLING ENVIRONMENT

Resources & Infrastructure

Innovation Culture

1. *Further develop and iterate an improved solution evaluation tool/ mechanism to support impact assessment and make the evaluation process more efficient*

Suggestions to do this:

- **A clear workplan for innovation implementation:** To avoid confusion around what will happen post design sprint, consider providing participants with a clear workplan outlining key timeframes and expectations for testing and iterating their innovations at their schools/ organisations. Emphasise the importance of continuing to build and use their testing plan, to test and iterate their ideas
- **Maximising efficiencies in innovation evaluation:** Whilst the teams-based approach will mean a reduced number of innovations for Project Officers to oversee and evaluate, there are still ways to make the process of evaluating innovations more efficient by reducing the need for POs to travel to every school. E.g.: 1) Create a Whatsapp questionnaire version of the solution evaluation tool. Participants need to share their innovation evaluation information with Project Officers via Whatsapp. Or, 2) Participants could all return to a central location once a month during the 3 month innovation evaluation period, to provide updates on their innovation evaluation criteria
- **Improved innovation evaluation criteria:** Simplify the innovation evaluation process using 'feasibility, desirability and viability' as the key evaluation criteria, as now being used by AKF Kenya with Thinkplace's support. E.g. to test viability- gather data on pricing of their innovation when produced at different scales i.e. are there economies of scale when purchased in large quantities. Project Officers can score each innovation on these three criteria.
 - Alternatively, consider using the evaluation criteria defined by the OECD DAC network: relevance, effectiveness, impact, coherence, efficiency and sustainability
 - For either criteria, provide clear definitions and ways of determining the appropriate score for each innovation

Driving better innovation implementation

IMPACTS

Motivation

Ability

BUILDING BLOCKS

Support

ENABLING ENVIRONMENT

Existing Responsibilities

2. *Provide facilitators with more opportunities to put HCD methodologies into practice, e.g. through HCD bootcamp. Consider ways to provide Project Coordinators and Project Officers with more time for reflection e.g. splitting the role of Project Coordinator and facilitator*

Suggestions to do this:

- Experiential learning to support the transitions from facilitator to HCD coach:** Experiential learning is key to building a deeper understanding of the HCD approach and mindsets. Having their own practical experience in applying HCD will support facilitators to move from simply teaching process steps, to really understanding the principles and mindsets that underpin a human-centred design approach. By 'learning through doing' facilitators will be able to learn from their own mistakes and experiences to help them better coach participants through the design sprint. This could take the form of an HCD sprint combining all the facilitators across East Africa. At the Facilitator HCD sprint, facilitators could work through a design challenge that is common across the regions, then design innovations to test within their localities
- Clearly defined facilitator/ Project coordinator roles to improve support quality:** Consider splitting the facilitator and Project coordinator role so that the coordinator can focus on organisation of the programme and guidance to the facilitators, without needing to be caught up in facilitation themselves
- Mechanism to support Project Officer implementation support:** See previous slide for suggestions around how the innovation evaluation tool/ mechanism could be improved to support Project Officers oversee the evaluation process for multiple innovations.

 - Woreda education officers evaluation:** In addition, could consider involving woreda education officers in the evaluation process. As they are already visiting schools, they could be provided with innovation evaluation criteria to gather data on school innovations during their visits. They could then share back findings to AKF Project Officers, avoiding Project Officers from having to regularly visit every school

2022 Learning Innovations

List of 22 Learning innovations per team across the 3 cohorts: pre-primary, primary and CSOs



2022 Innovations List

This year, implementing a team—based approach meant teachers and CSOs were grouped into teams of 3-5 individuals. There were a total of 10 teams for the pre-primary cohort, 9 for the primary cohort and 3 CSO teams. This resulted in 22 distinct innovations.

Pre-primary

10 innovations addressing Pre-primary schools learning challenges facing 5 year old's.

100% of the innovations under this level address issues around the learning environment, fostering 3Rs; Literacy (Reading, Writing) and Arithmetic/Numeracy and other skills. Most ideas focus on developing teaching and learning materials to enrich learning environments. The innovation description shows the integration of “non-academic/soft skills” in the learning process.

Primary

9 Innovations for Primary school addressing learning challenges facing students in standard four (10 years old).

Approximately 50% of the Innovations focus on learning environments, while 40% address overcrowded classrooms and creativity issues. And 10% focus on low performance. Looking at these innovations, teachers aim to address challenges facing students in acquiring academic and soft skills like problem-solving, creativity and self-awareness.

CSOs

3 Innovations for youth development partners addressing issues faced by out-of-school youth (15 to 25 years old). They focus on specific domains like entrepreneurship, creativity, awareness, and life skills that deal with social and economic challenges.

2022 Innovations List: Pre-primary

10 innovations for pre-primary

	Design team schools	Identified Challenge	Innovation	Brief Description of the Innovation
1	<ul style="list-style-type: none"> Majimatitu Nzasa Mbande 	Lack of creativity in the improvisation of teaching and learning materials that enhance proper learning of 3Rs and other skills	Parents engaged in development of teaching and learning materials.	<p>The lack of innovative learning and teaching materials leads to a poor learning environment. The situation has been triggered by poor collaboration between teachers and parents; the team agreed to address this issue immediately by involving parents in developing teaching and learning materials</p> <p>Schools must invite parents to discuss and agree with the idea and plan when they will be convening at schools for materials development. It will also encourage parents to bring schools safe, unused resources from home that could help the learning process</p>
2	<ul style="list-style-type: none"> Maendeleo Toangoma 	Learners fail to master the 3Rs on time	Learning through Package visibility	Learning through package visibility involves all sense organs supporting a child to learn. This means learning by seeing, doing, and listening. The Innovation proposes using collective techniques and materials such as sports and games, Schools bags and T-shirts printed vowels and numbers, and a painted learning environment (walls, furniture, floor etc.)
3	<ul style="list-style-type: none"> Mtanda Wailes Jangwani Mpilipili Kineng'ene 	Overcrowded classrooms affect the learning process	Creative and active class	Learners actively make their learning materials based on their talents and interest. Having enough T/L materials in class that tally the number of learners may help manage the class. Learners interacting with enough materials in their groups may support teachers in facilitating the learning process properly
4	<ul style="list-style-type: none"> Muungano Tulieni Chilala Mkupama 	Overcrowded classrooms affect the learning process	Learning in a rich environment	Enriched and plenty equipped classroom with various teaching and learning materials and games that the learners may use in the learning process inside or outside the classroom. Teachers have to ensure they engage parents, the community and in the collection of resources enhancing the learning environment
5	<ul style="list-style-type: none"> Likon'go Kitomanga Mchinga 1 	Teaching and learning techniques that do not contribute to student acquisition of skills	Excellent T/L technique (Television).	It is going through various challenging topics and making a tape-like material by drawing pictures and making a television prototype with a roller that can rotate the tape and give an interface of different images and concepts that can be taught/ or put on emphasis during sessions on particularly challenging domains

2022 Innovations List: Pre-primary

10 innovations for pre-primary

	Design team schools	Identified Challenge	Innovation	Brief Description of the Innovation
6	<ul style="list-style-type: none"> Madangwa Nachunyu Mnolela 	Poor teaching and learning environment delay children in acquiring learning outcomes	Learning Field	Teachers develop a variety of learning materials that will enable students to acquire skills, there will be a variety of games that they will learn from, and such games and materials will make students develop a variety of skills such as creativity, critical thinking, communication, relating to one another, feelings emotional control
7	<ul style="list-style-type: none"> Namupa Nyangao Namangale 	Poor teaching and learning environment delay children in acquiring learning outcomes	Garden Of Tools	Teachers will develop various materials to engage students in the learning process to replace traditional teaching that does not engage students in the learning process. The in and outside classes will be equipped with different learning materials to enable students to acquire additional skills
8	<ul style="list-style-type: none"> Nyangamara Linoha Chiuta Chilala Mitanga 	Poor teaching and learning environment delay children in acquiring learning outcomes	Learning Furnace	Learning Furnace is an idea that aims at involving students in using locally available materials such as left-over products of the tailors, carpenters, meticulous, rags and grasses to make homestead use materials, such as carpet, brooms and learning materials. this boost students' teamwork, creativity, critical thinking, problem solving and other essential life skills
9	<ul style="list-style-type: none"> Mahumbika Luwale Mtama 	Lack of proper teaching and learning materials hinders learners from being creative and cooperative	Victory Table	The victory table is the table with games for playing while learning, will have some pegs like cards arranged randomly, and students will be asked to put them from 0-9 in the logical order or a-u vowels; hence they will be able to acquire literacy and numeracy. Learners, at some point, will be competing in pairs. The first to finish will be the winner, and they will learn how to relate and interact with others. They will use tables to draw pictures or mud to make idols of the pictures they will be instructed to make. Hence, they will be creative
10	<ul style="list-style-type: none"> Group of schools with Special Needs classes 	Students with special needs fail to master 3R skills & life skills	Let's Meet	This designed aid will involve all students with different abilities by creating an environment that accommodates learning for all. This includes students with disabilities such as vision and hearing impairments who will have brail in this aid to enable them to study, students with an intellectual impairment will be accommodated with different colours drawn in the aid to capture their attention

2022 Innovations List: Primary

9 innovations for pre-primary

	Design team schools	Identified Challenge	Innovation	Brief Description of the Innovation
1	<ul style="list-style-type: none"> Majimatitu Nzasa Mbande 	Lack of creativity skills to standard four class	6 Corners of learning and creativity	Due to a lack of innovative learning and teaching techniques, most standard four students lack creativity skills because learning is not engaging; They learn more theoretically than practically. Therefore, 6 corners of learning and creativity solutions will provide opportunities for students to learn through practical and innovative tools
2	<ul style="list-style-type: none"> Toangoma Majimatitu Maendeleo 	Lack of innovative materials and techniques in the teaching and learning context	Constructive Learning	Teachers have been teaching using traditional techniques in poor environments that do not attract creativity in children and innovative teachers. Therefore, using constructive learning solutions to improve creativity and critical thinking will support teaching and learning
3	<ul style="list-style-type: none"> Likon'go Kitomanga Mchinga 1 	Overcrowded classrooms and traditional use of teaching & learning techniques affect students in learning mathematical operations	Mathematics in Society	The solutions will bring together students' parents to prepare resources, starting with the School Management Committee in making and creating teaching and learning materials for students to learn. Among prototypes, there will be a numbered circle with 5 circles involving numbers with values of tens of thousands (std four limits), mathematical symbols, and cards. The mentioned circle will be used to solve mathematical problems
4	<ul style="list-style-type: none"> Mtanda Wailes Jangwani Mpilipili Kineng'ene 	Poor learning environments, and techniques, hinder the learning process as well as acquiring essential skills	My School, My Life	It relates to learning topics/knowledge with the reality of life by using games and various interactive methods to enable the student to gain knowledge that will help them acquire learning outcomes
5	<ul style="list-style-type: none"> Muongano Tulieni Chilala Mkupama 	Low student performance	Platform Of Blended Learning Methods	Use collaborative teaching methods that consider students as the centres of knowledge.

2022 Innovations List: Primary

9 innovations for pre-primary

	Design team schools	Identified Challenge	Innovation	Brief Description of the Innovation
6	<ul style="list-style-type: none"> Nyangamara Linoha Chiuta 	Overcrowded classrooms, traditional teaching and learning methods, lack of materials, and poor infrastructure affects students' learning performance	Book Of Our Methods	Most teachers need to remember to apply teaching methods trained in college. A book of our knowledge may respond to this challenge. The book will be beneficial for the teachers and the students. The book compiles several teaching methods and aids that are useful for engaging students; the book also has a section for different games, procedures and actions for the students to practice while learning; this will enable students to gain skills
7	<ul style="list-style-type: none"> Madangwa Nachunyu Mnolela 	Teachers lack skills in teaching some subjects	Use Of Information Technology	Teachers will use technology to learn how to effectively teach a specific topic with the support of modern technology such as mobile phones and computers. They will learn how to engage and adopt attractive teaching methods and materials that engage students. Teachers will use online and offline platforms such as LMS to learn and refresh their teaching practices
8	<ul style="list-style-type: none"> Namupa Nyangao Namangale 	Poor teaching environments and tools affect the acquisition of learning outcomes.	Islands of materials	This involves a variety of teaching aids, as teachers do not usually use different learning materials. Therefore, islands of materials, where durable and well-prepared materials will be kept and made available to any teacher, may inculcate the culture of developing materials, keeping and using them whenever needed. With the use of ready-made materials, teachers will be able to support students gain different skills such as critical thinking, creativity, problem-solving, teamwork and all other related skills that students can get when engaged
9	<ul style="list-style-type: none"> Mitanga Mahumbika Luwale Mtama 	Unfriendly teaching and learning environments affect performance	Spider Web	Spider web is the approach of learning which involves connecting learning theories in the classroom with the actual environment. Students will be learning in school while having an opportunity to practice in the real world. This will boost student memory, and they will be able to use skills to solve the problems they encounter in daily life

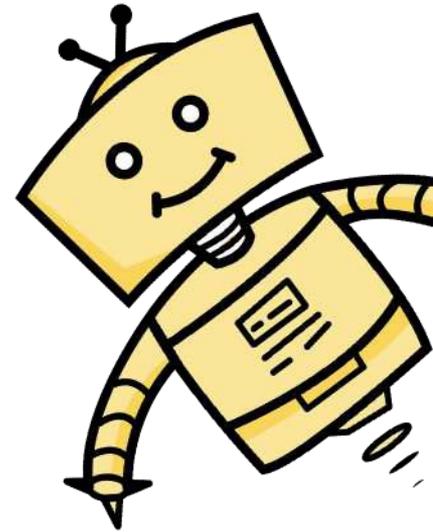
2022 Innovations List: CSOs

3 innovations for CSOs

	Design team schools	Identified Challenge	Innovation	Brief Description of the Innovation
1	<ul style="list-style-type: none"> Makangarawe Teyodentyc 	Lack of life skills for out-of-school youth to address day-to-day challenges	Arts And Sports	Arts and sports will help out-of-school youth to acquire necessary life skills by engaging them in sports and art activities. This will improve their life skills and help them make the right decision and better choices on means and ways of solving their challenges
2	<ul style="list-style-type: none"> Rowodo maarifa su 	Lack of accurate information about youth opportunities	Nipe Mchongo Forum	It involves government leaders, religious leaders, foster parents, youth, and society to create the structure of knowledge where youth can outsource opportunities and information
3	<ul style="list-style-type: none"> Lango Lisawe Liwopac 	Youth who engage in drug use education and employment opportunities	Sport Platform	We are helping out-of-school youth who engage in drug use through the sports platform Through the sports platform, young people will engage in various games, including volleyball and the Dice Ball game; psychological education to get rid of drug use habits and entrepreneurial activity, including making plant soaps and water soaps and processing foods such as honey and beeswax

Appendix

Terms and Acronyms used throughout document



Terms

The following terms are used throughout the document:



Participant: This is an umbrella term that refers to all groups enrolled in the HCD process - pre-primary, primary, and secondary teachers, and Civil Society Organisations. Where a finding applies to a specific sub-group, they are identified as so.



Teacher: This term refers to all educators that are enrolled in the HCD process. This includes grade-level teachers, subject teachers, and school leaders (who are typically Head of Institutions (HOI), Deputy Headteachers, and Senior Teachers).



Civil Society Organisation: A Civil Society Organisation (CSO) actively engaged in the HCD process. Similar to secondary schools, they are working to create solutions for the 14-year-old cohort age.



Facilitator: Facilitators prepare workshop and project materials, lead workshops, oversee participant learning journeys and provide design critiques.



HCD Process: This term is used when referring to all engagements associated with Schools2030's implementation of the HCD process. This includes the activities that participants engage with both in and out of the workshops to carry out the process, as well as the support mechanisms and resources around them.



Schools2030 Programme: This refers to the wider Schools2030 programme activities that extend beyond the HCD process. This includes monitoring and evaluation activities and occasions such as the showcase event.



Acronyms

HCD - Human-Centered Design

YDP - Youth Development Partner

CSO - Civil Society Organisation

HMW - How Might We

POV - Point of View

MVP - Minimum Viable Product

TPD - Teacher Professional Development

MoE - Ministry of Education

