



HCD EXCHANGE

# Dash Master Gaming Report

## HCDEXchange

Jan 7, 2021

Image Credit: Yagazie Emezi/Getty Images/Images of Empowerment

## OUR VISION

The HCDEExchange is a *community of practice* dedicated to **advancing learning, evidence, and practice** in human-centered design and adolescent sexual and reproductive health (HCD+ASRH). We work in Sub Saharan Africa and Southeast Asia.

Together we explore, test, document, and evaluate this field, while supporting each other and sharing what we learn.

We do this through an active community of practice, centered on youth and powered by a supportive infrastructure.

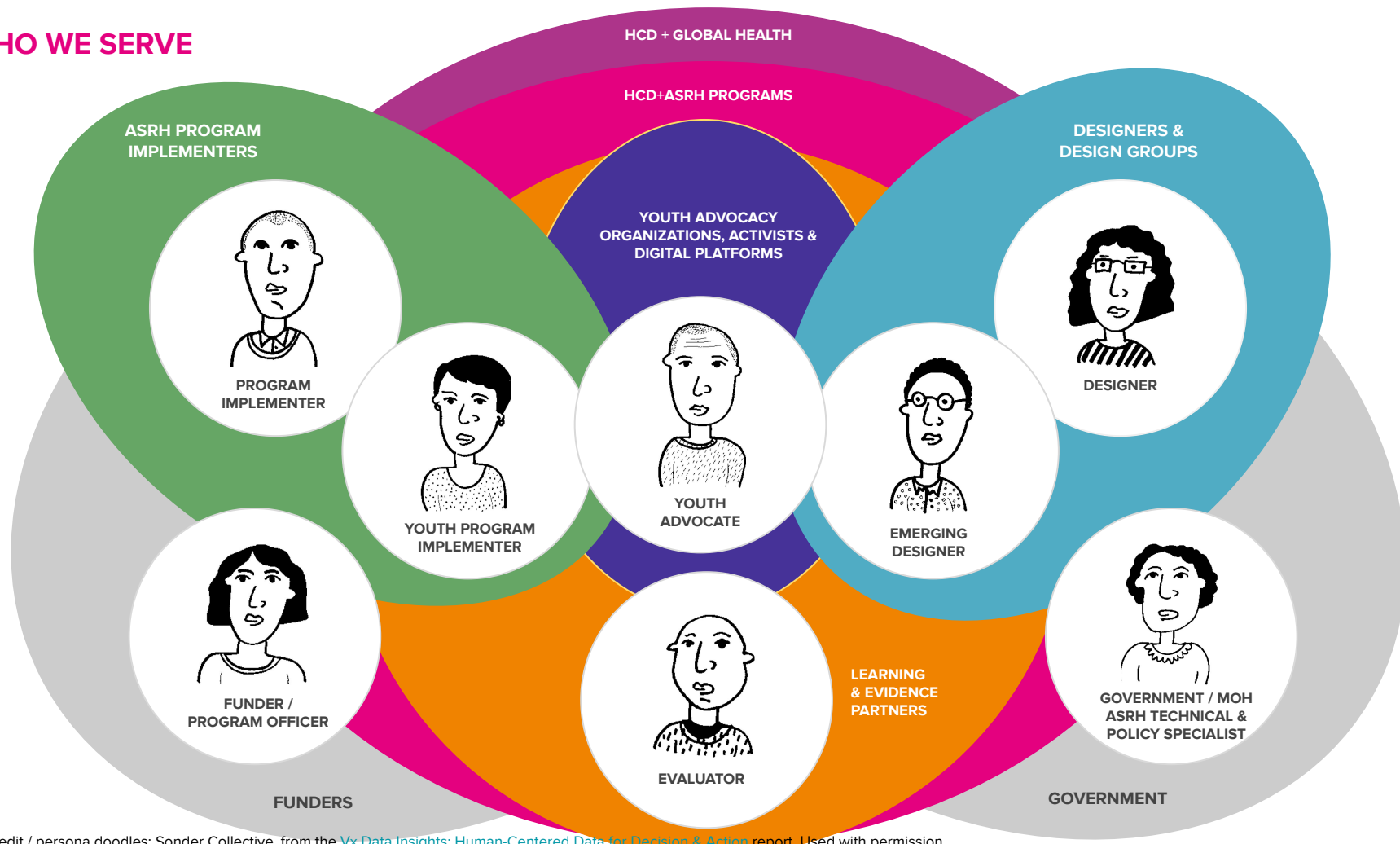
## OUR HYPOTHESIS

The HCDEExchange's hypothesis is that **the use of Human Centred Design (HCD) can strengthen Adolescent Sexual Reproductive Health (ASRH) strategies, interventions, and policies, and can help us involve and reach youth with appropriate and effective solutions.**

As the use of HCD in ASRH grows, funders and practitioners seek to document further evidence and better understand the dynamics of human-centered approaches to improving youth sexual health.

The HCDEExchange aims to catalyze the learning and evidence generation for the HCD+ASRH field.

## WHO WE SERVE



# DASH MASTER GAMING

## Background

For the past 6 months (July 2020 to December 2020) HCDEExchange has been using the Atingi platform to roll out health games amongst youth in Sub Saharan Africa and Southeast Asia with the goal of increasing learning around ASRH and HCD and to tracking the knowledge increase.

Our target was about 7,000 adolescents and youth aged between 14 and 30 years in both Sub Saharan Africa and Southeast Asia. In order to attain this target, HCDEExchange used the following strategies:

- Created content for the monthly games based on the monthly guideline themes by WHO/ASRH 2020.
- Leveraged on HCDEExchange' network composed of 9 implementing partners who are youth-led or run programs in Sub Saharan Africa and Southeast Asia.
- Developed an incentivization strategy and mechanism to engage adolescents and youth and increase the retention rate of gamers over the 6 month period.
- Measured and monitored knowledge acquisition over time using an embedded analytics platform on the yeepa gaming.
- Used social media platforms and networks of HCDEExchange to disseminate and extend the reach and impact of these games .

## DASH MASTER GAMING

### Gaming Partners

#### A. Sub Saharan Africa:

**Kenya:** [Youth in Action \(Y-Act\)](#) is an initiative of Amref Health Africa that aims to mentor, support and increase the capacity of youth advocates to transform youth policy and projects in the areas of Sexual Reproductive Health Rights (SRHR) in Kenya.

**Kenya:** [Maisha Youth](#) is a virtual movement working to inspire and empower young people to make informed decisions that lead them to living healthy productive lives, and being the agents of change in their families, communities, and countries.

**Ethiopia:** [Big Dream](#) is a Youth Led NGO working to advance awareness on quality education, youth empowerment, healthy living and green activism.

**Namibia:** **Deluded Bros Inc** is a Namibian initiative that prides itself in using creative arts and popular culture.

**Tanzania:** [Restless Development](#) has been operating for over 25 years working across 18 regions including rural and urban areas. Their vision is to ensure that young people are transforming their societies supported fully by their governments, their communities, businesses and civil society institutions. In 2019, they empowered 31,688 Change-makers (15,103 males, 16,585 females) to lead development and change in their communities.

**Namibia:** [Outright Namibia](#) is one of the regional offices of Outright International, working to represent the voices of LGBTI people.

**Cameroon:** [MenEngage Africa](#) is a chapter of the larger MenEngage Africa Alliance seeking to provide a collective voice on the need to engage men and boys in gender equality.

## DASH MASTER GAMING

### Gaming Partners

#### B. South East Asia

**India:** Restless Development has been operating in India for over 30 years. Their vision is to empower adolescents and youth and to address SRHR issues. In 2015, through their *not so young* campaign they reached more than 180,000 young people in urban and rural communities.

**India:** The YP Foundation is a non-profit organization that aims to empower young people to access critical information about their health, education, and rights in order to enable them to analyze and use this information for their development and to become successful advocates for rights of other youth. Since initiation in 2002, the organization has worked directly with over 6500 young people across its programme divisions using peer led methods of implementation and community engagement.



# DASH MASTER GAMING

## Learning Objectives

To create awareness and build knowledge in ASRH and HCD for young people in Sub-Saharan Africa and Southeast Asia.



## Gaming Platform & Design

Powered by yeepa, HCDEExchange health gaming was made possible through [www.atingi.games](http://www.atingi.games) platform on a monthly basis and designed according to the monthly theme or topic per WHO guidelines.

## Instructions for Gaming

1. First time gamers were required to register their credentials to the platform with unique registration codes provided for each region/network or group.
2. Details provided were name, nickname, phone contact, region and email address.
3. Email confirmation was sent for a successful registration process.
4. For consequent logins, the gamers had to put in their login credentials provided during the initial registration process.

## DASH MASTER GAMING

### Gaming Design

We launched each game in 2 levels. As a strategy to gain traction for gaming and retain youth in the platform, we held 2 live gaming sessions on the last Friday of August and September 2020. The sessions were live streamed on our YouTube Channel and Facebook page.



Month	Topic	Level	Date Launched
July	HIV/AIDS	Level 1: HIV Prevention Level 2: HIV Care	27th July 2020
August	Youth Powered Design	Level 1: Human Centered Design Level 2: Youth Powered Design for ASRH	12th August 2020
September	Teen Pregnancy Prevention	Level 1: Teen Pregnancy Prevention Level 2: Contraception	25th September 2020
October	Comprehensive Sexuality Education	Level 1: Comprehensive Sexuality Education	14th October 2020

# DASH MASTER GAMING

## Content Development

- The content of the games were developed collaboratively with the gaming partners and the Youth Leadership Hub\*.
- HCDEExchange trained the gaming partners on how to develop the content and once games were completed we uploaded them to [www.atingi.games](http://www.atingi.games) platform

## Social Media Strategy

- Social media posts were released a week prior to the launch of monthly games. Upon the launch, 2 reminder posts were shared twice a week.
- Short video clips from the Youth Leadership Hub were disseminated on HCDEExchange social media.
- Gaming partners also advertised on their social media platforms for wider reach.

\* group of youth who guide and work alongside the HCDEExchange Secretariat to advance the community, ensuring meaningful youth engagement.

## Incentivization Mechanism

Our incentivization strategy recognised gamers for each game that was based on the best overall player who had the highest success score and yeepa index. This was reflective on their frequency of gaming.

The Bi-weekly prizes were in the form of airtime (data) of \$20 (Ksh.2,000) incentivizing the youth to keep playing. Through an HCD process, the HCDEExchange Team, Youth Leadership Hub and the gaming partners iterated on the prize mechanism to accommodate the geographical variance of the gamers.

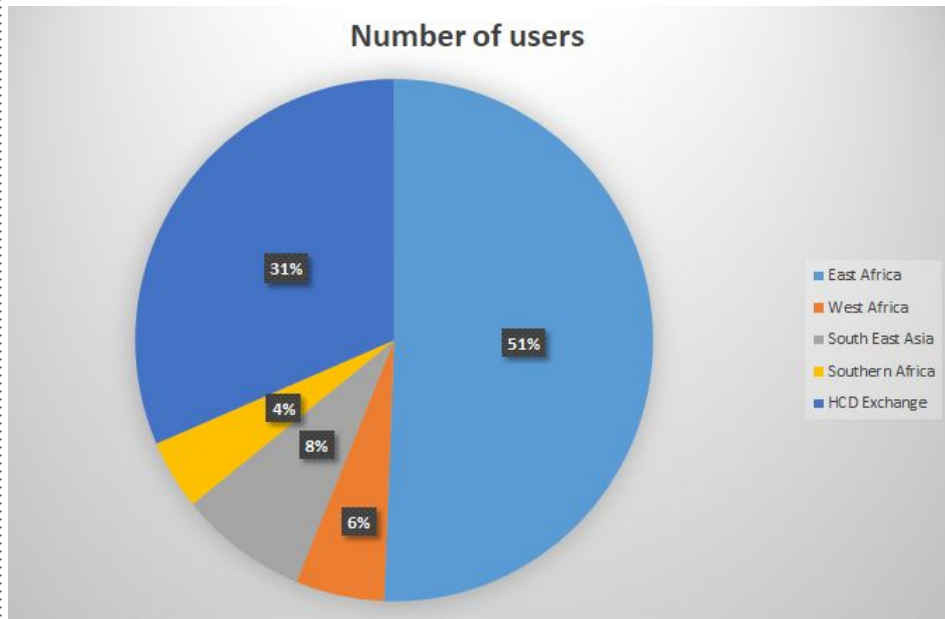
## GAMING RESULTS

### Youth Powered Design Game

Learning Objectives: Level 1 and 2 comprised of about 100 questions and had the following learning objectives:

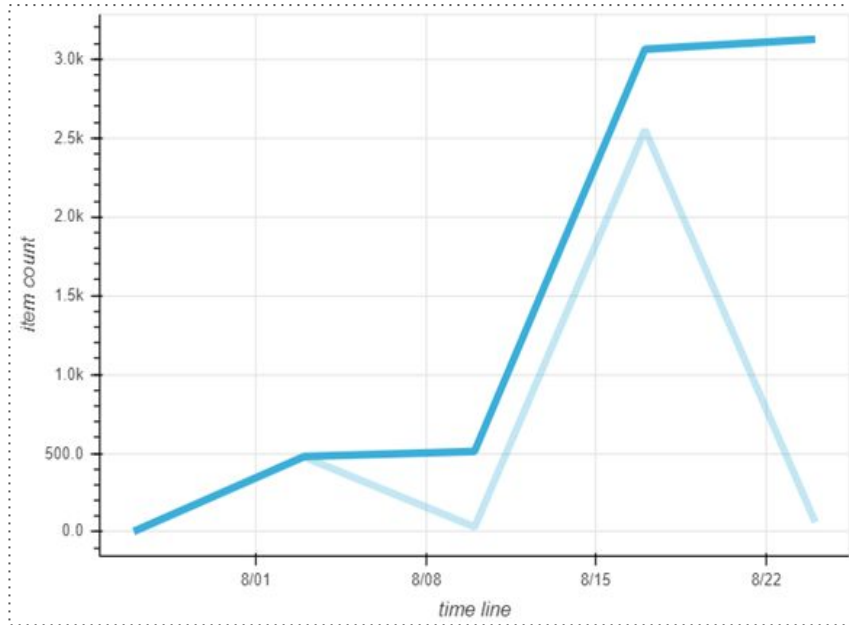
1. **To enable gamers to apply design thinking to mitigate challenges faced by youth** including Gender Based Violence (GBV) and HIV prevention
2. **To process the extent of GBV and HIV** prevalence and challenges in their communities

### Registration by cohort – 1st Aug to 15th Sept 2020

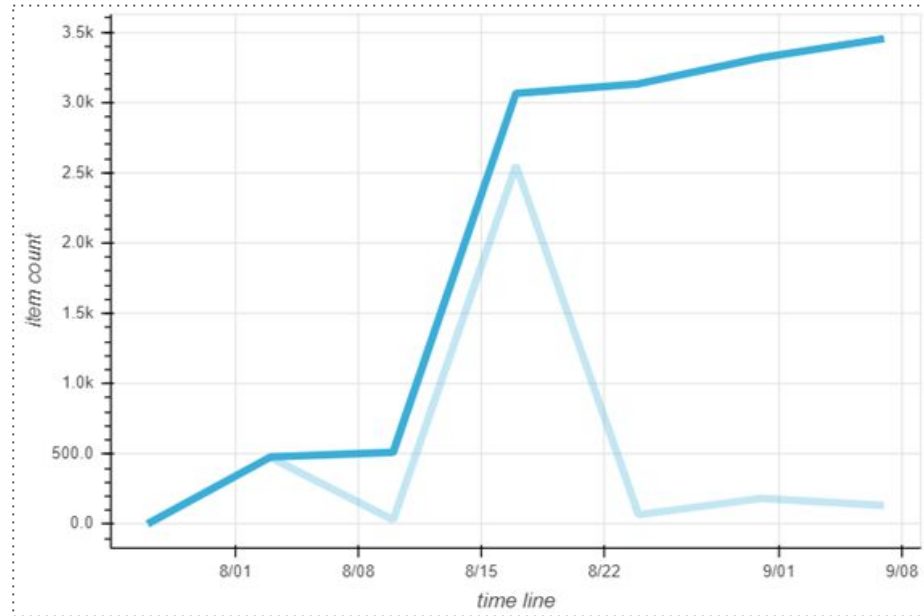


## Platform Usage

### Youth Powered Design Game



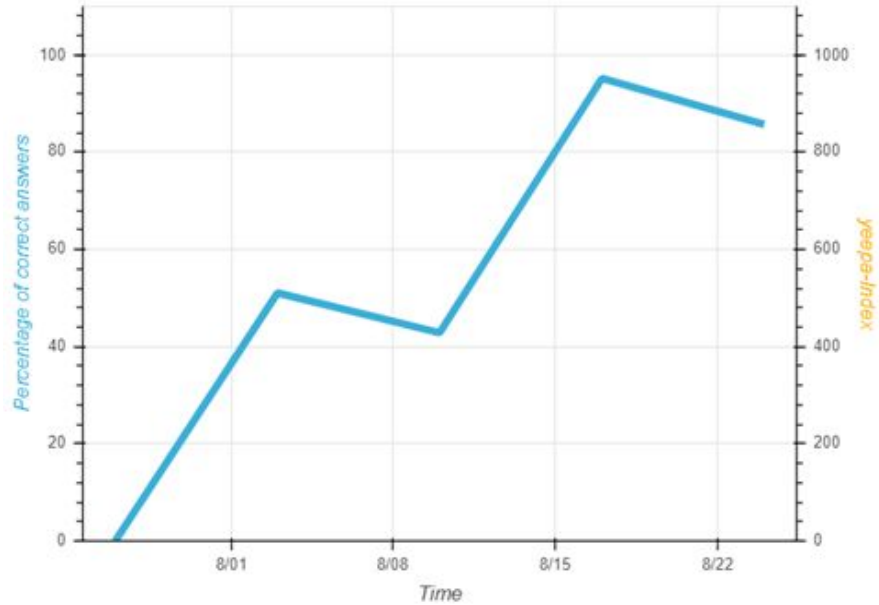
Since its launch, questions of the DASH Master – **Youth Powered Design Level 1** game has been played over **3000** times



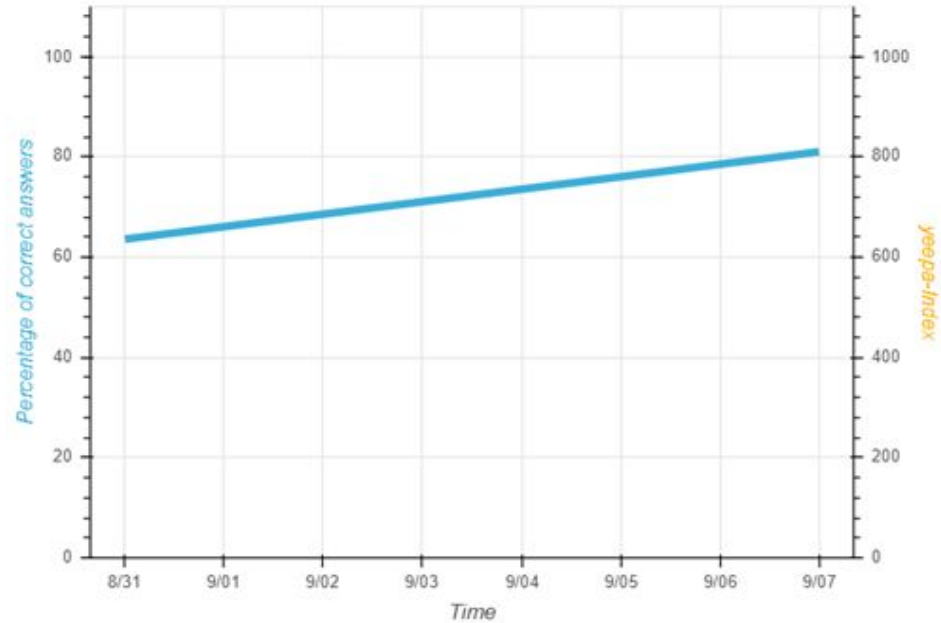
Since its launch, questions of the DASH Master – **Youth Powered Design Level 2** game has been played over **3500** times

## Knowledge Index

### Youth Powered Design Game



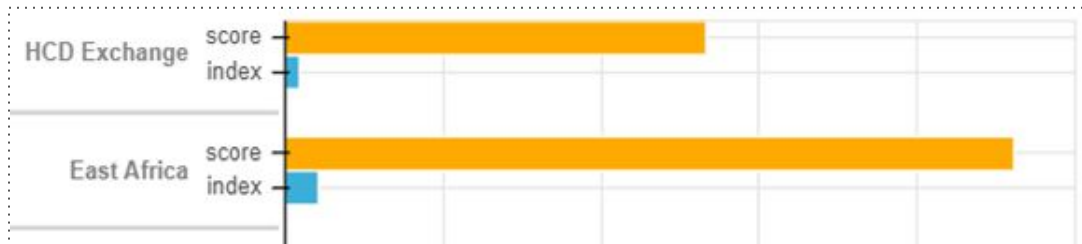
The percent of correct answers has been on a steady rise for Level 1 reaching an **average of about 85%**



The percent of correct answers has been on a steady rise for Level 2 reaching an **average of about 81% from 63%**

## Knowledge Index

### Youth Powered Design Game



**For group performance,** enough data was generated for HCDEXchange, South East Asia and East Africa groups:

**East Africa – 84% success score** and an average yeepa index of 81

**HCDEXchange – 60% success score**

**South East Asia – 54% success score**

## How Well Were Questions Answered in Level 1?

### Youth Powered Design Game

#### ITEMS



ID	Question-Text		Score	Diff.	Dur.	Max
903	Which one is NOT a pre-condition for meaningful youth engagement?	▼	62.7%		7.5s	68.1%
904	What are the core elements of meaningful youth engagement? (Multiple answers)	▼	66.7%		8.9s	50.0%

910	True or false: Consent can be withdrawn at any time in a sexual act	▼	98.0%		5.6s	98.0%
871	In what areas in your life can design thinking be applied?	▼	98.1%		5.0s	98.1%
879	True or false: Women can be perpetrators of gender based violence	▼	98.2%		5.5s	100.0%
883	If you were to apply to design thinking to tackle HIV prevalence and incidence, what particular areas would you focus on or think would have the most impact?	▼	98.3%		6.1s	53.4%
881	True or false: 'Men can be victims of gender based violence too'	▼	100.0%		6.1s	100.0%

The gamers scored lowest on questions around meaningful youth engagement.

The gamers answered correctly and scored highest on true/false questions around gender based violence and consent.

## How Well Were Questions Answered in Level 2?

### Youth Powered Design Game

▼ Design thinking level 2    ▼ Filter: All Questions

ITEMS				
ID	Score	Diff.	Dur.	Max
1164	28.6%		9.2s	50.0%
What is the official UN body mandated to create space for young people to participate in UN processes?				
1139	37.0%		16.1s	37.0%
Which of the following is NOT an effective characteristic of public messaging around ASRH?				
1147	39.1%		12.4s	52.2%
In which scenario is Meaningful Youth Engagement achieved?				

For Level 2, the gamers answered least correctly on scenario questions around meaningful youth engagement, public message and mandated bodies responsible for youth participatory processes.

## Responses to Survey Questions: Level 1



### Youth Powered Design Game

? 868

Survey questions to help gauge knowledge background of gamers

50.0%

Have you ever taken an HCD/Design thinking course or class?

Overall result	%	Count	Given Answer
	50.0%	8	Yes
	50.0%	8	No

? 871

100.0%

In what areas in your life can design thinking be applied?

Questions designed to help gamers articulate where they can apply their knowledge

Overall result	%	Count	Given Answer
	0.0%	0	Your work/professional life
	0.0%	0	Your personal life
	0.0%	0	Your hobbies
	100.0%	10	All areas of your life

## Responses to Survey Questions: Level 2

### Youth Powered Design Game

1134

80.0%

Have you ever been non meaningfully engaged by an organization?

Overall result	%	Count	Given Answer
	80.0%	8	Yes
	20.0%	2	No

1135

50.0%


What channels do you use most frequently for advocacy around sexual reproductive health?


Overall result	%	Count	Given Answer
	50.0%	5	Social Media
	10.0%	1	Physical campaigns
	0.0%	0	Online events
	40.0%	4	Creative arts
	0.0%	0	Offline engagements

Questions to help gamers decide which mediums to use for youth programming

## Social Media Analytics

### Youth Powered Design Game

<b>Twitter</b>		
Total Impressions	Engagements	
1388	81	

<b>Instagram</b>		
Stories Reach	325	
Post Reach	275	

<b>Facebook Live Gaming Session</b>		
82 people reached		
39 Likes, comments and shares		

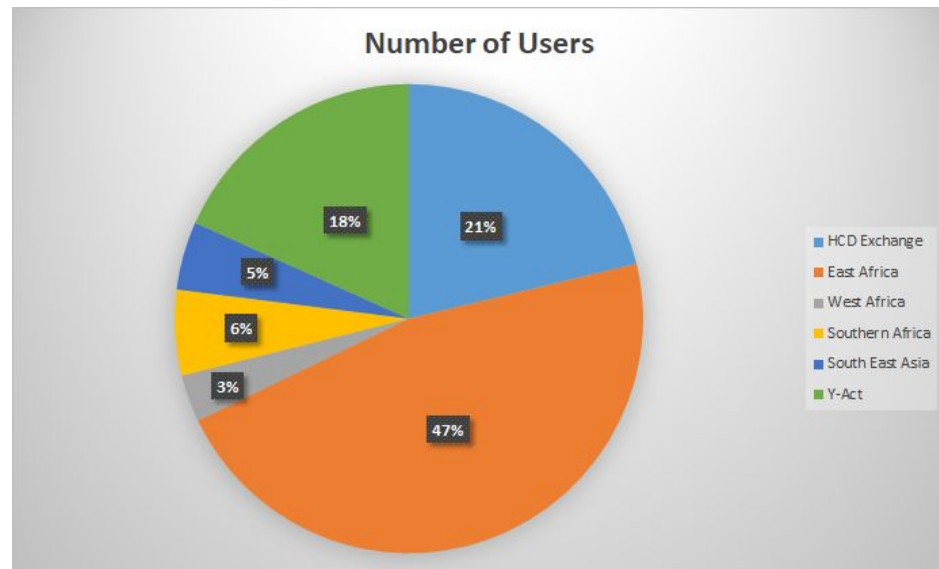
## GAMING RESULTS

### Teenage Pregnancy Prevention Game

Levels 1 and 2 comprised of about 120 questions and had the following objectives:

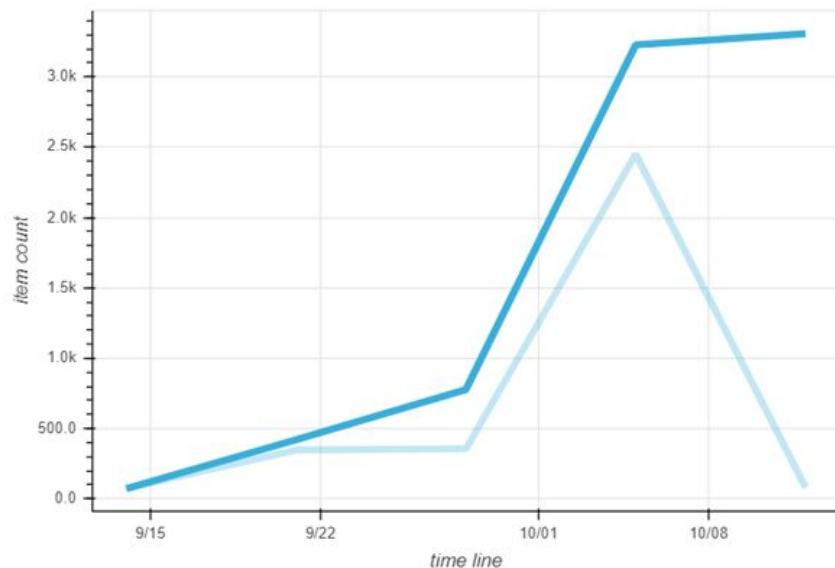
1. To provide more information about contraceptive methods
2. To understand the impact of teen pregnancies on youth
3. To identify the causes and impacts of adolescent pregnancy
4. Safe abortion practices
5. To enable partners work around teen pregnancy prevention

### Registration by cohort – 15th Sept to 19th Nov 2020

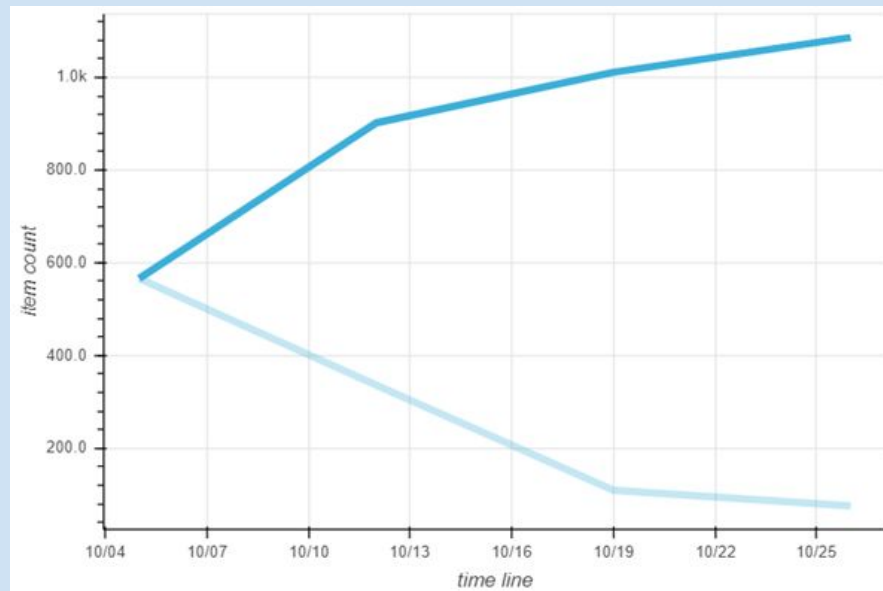


## Usage

### Teenage Pregnancy Prevention Game



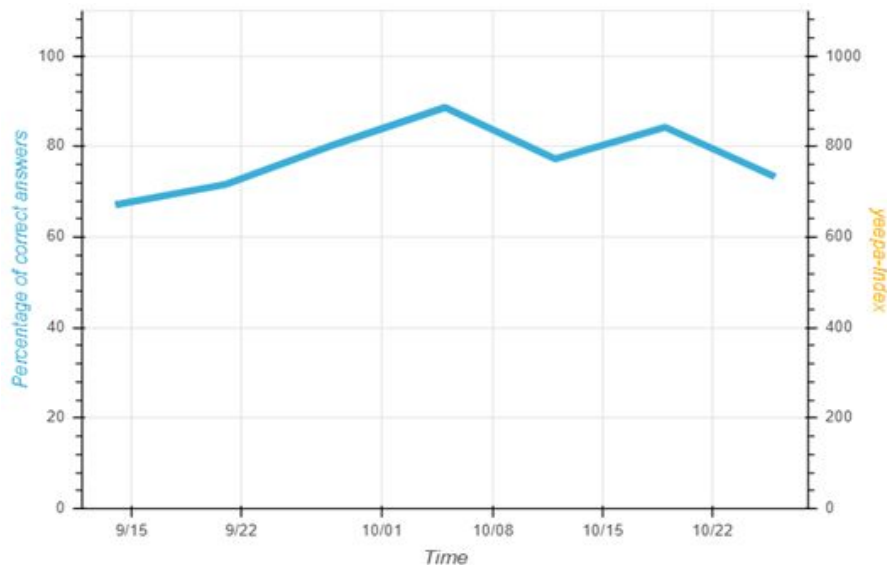
Since its launch, questions of the DASH Master – **Teen Pregnancy Prevention Level 1** has been played over 3000 times



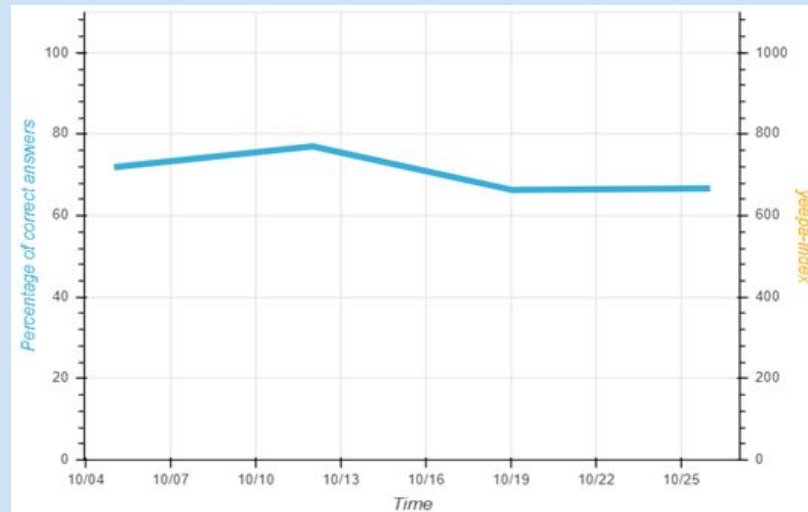
Since its launch, questions of the DASH Master – **Teen Pregnancy Prevention Level 2** game has been played over 1000 times

## Knowledge Index

### Teenage Pregnancy Prevention Game



The percent of correct answers for Level 1 has **increased from 67% to an average of 73%**



The percent of correct answers for Level 2 **has decreased 71% to 66.7%**

## How Well Were Questions Answered for Level 1?

### Teenage Pregnancy Prevention Game

Which doesn't apply to the cause of teenage pregnancy ?

1592 79.0% 6.5s 79.0%

What is the BEST way to advocate for safe contraceptive methods for young girls?

1582 79.4% 6.7s 79.4%

Which one is NOT a health problem or complication related to teenage pregnancy?

1595 79.4% 5.4s 79.4%

Home pregnancy tests (HPTs) work by detecting the presence of hCG in the urine. hCG refers to ?

1564 79.7% 4.9s 79.7%

The gamers answered questions around the causes, complications and testing for teenage pregnancy least correctly for Level 1

True or False: Poor parental guidance contributes to teen pregnancy.

1603 97.0% 5.0s 94.0%

Do you think health workers treat teen parents differently than older parents based on your experience?

1604 98.7% 6.4s 32.9%

What advice would you give to a teen who is sexually active but afraid to talk to their parents or guardians? Select the answer that is most appropriate to you

1602 100.0% 6.3s 100.0%

What qualities do you think would make someone a good parent?

1607 100.0% 3.8s 93.8%

Do you think parents have a big role to play in the prevention of teenage pregnancy?

The gamers answered questions around role of parents and health workers most correctly for Level 1

## How Well Were Questions Answered for Level 2?

### Teenage Pregnancy Prevention Game

ID	Score	Diff.	Dur.	Max
1608	100.0%		5.8s	100.0%
What does SRHR stand for?				
1609	93.3%		3.9s	93.3%
SRHR affects both male and female.				
1610	91.7%		6.3s	91.7%
Which of the following is NOT a speciality of HCDexchange?				
1611	76.7%		7.8s	76.7%
Which one is not an activity in the ideation stage in design thinking?				
1612	74.3%		5.8s	74.3%

The gamers answered questions around SRHR, design thinking (repeat question) and HCDExchange correctly

ID	Score	Diff.	Dur.	Max
1659	0.0%		8.2s	60.0%
What is the current prevalence rate of teenage pregnancies in Africa?				
1676	0.0%		15.1s	50.0%
What are some of the barriers to legislation of sex education in public schools globally?				
1642	16.7%		10.6s	41.7%
How many unintended pregnancies occur each year among adolescents girls aged 15-19 years in developing countries				
1635	25.0%		22.1s	25.0%

The gamers did not understand well the questions around statistics of teen pregnancies and legislation in schools globally

## Responses to Survey Questions: Level 1



### Teenage Pregnancy Prevention Game

Survey questions to help gauge awareness of products and services availability commonly used by youth

1575

91.7%

Which contraception method is most used by youth in your country?

Overall result	%	Count	Given Answer
	0.0%	0	Oral pills
	91.7%	11	Male condoms
	0.0%	0	Female condoms
	8.3%	1	Emergency contraception
	0.0%	0	Other
	0.0%	0	I don't know

## Responses to Survey Questions: Level 1

### Teenage Pregnancy Prevention Game

Survey questions to help gauge awareness of products and services availability

1596

41.2%

During your teenage years, were you aware of contraceptive methods available to you?

Overall result

%

Count

Given Answer



29.4%

5

Yes



29.4%

5

No



41.2%

7

Just a little

1601

93.8%

Have you ever thought about how a pregnancy would affect your life right now?

Overall result

%

Count

Given Answer



93.8%

15

Yes



6.3%

1

No

Survey questions to help gauge vulnerabilities of youth and awareness of associated risky behaviours

## Responses to Survey Questions: Level 2

### Teenage Pregnancy Prevention Game

1668

100.0%

Deluded Bros Inc uses comic books to inform people on Socio-economic issues

Survey questions to help build awareness of youth about the gaming partners' work and the programming available to them

Overall result

%

Count

Given Answer



100.0%

8

Yes

0.0%

0

No

1669

50.0%

If you were to be given a position of power to change your community, what would you change?

Survey questions to help youth to critically think about and foster their agency in making changes in their communities

Overall result

%

Count

Given Answer



12.5%

1

Legislation tailored to care and develop young adolescents



50.0%

4

Come up with programs and initiatives that call for active youth participation in our communities



37.5%

3

Create safe spaces for young adolescents to air and discuss their daily struggles.

## Responses to Survey Questions: Level 2






### Teenage Pregnancy Prevention Game

Survey questions to help gauge the types of challenges in different countries and their prevalence

1136


27.3%


What is the most pressing adolescent sexual reproductive health issue in your country?


Overall result	%	Count	Given Answer
	27.3%	3	Teen pregnancy
	18.2%	2	Sexual and Gender Based Violence
	18.2%	2	Limited access to family planning
	18.2%	2	HIV/AIDS Prevalence
	18.2%	2	Unsafe abortions
	0.0%	0	None of the above


## Social Media Analytics

### Teenage Pregnancy Prevention Game

<b>Twitter</b>		
Total Impressions	Engagements	
3012	104	

<b>Instagram</b>		
Stories Reach	311	
Post Reach	394	

<b>Facebook Live Gaming Session</b>		
77 people reached, 10 engagements		
39 Likes, comments and shares		

<b>Zoom Panel Discussion – Internationation day of the girl</b>		
92 registered participants		
56 total uses (31 unique viewers)		

## GAMING RESULTS

### Comprehensive Sexuality Education Game

Comprehensive Sexuality Education (CSE) game had the following learning objectives:

1. To provide an understanding about CSE, best practices, sources of CSE and why it is important
2. To provide practical examples on how we can use HCD as an approach to advance CSE



PlayMeasureLearn

**DASH MASTER: Teen Pregnancy Prevention Level 1**

Eager to learn about designing contraceptives as a tool and being able to use your voice and knowledge to reduce teen pregnancies? This is the game for you!

Play!

**DASH MASTER: Teen Pregnancy Prevention Level 2**

This level is all about understanding the impact of teen pregnancies, spotlight the work partners are doing around teen pregnancy prevention and how we can apply design thinking to reduce consequences and incidence of teen pregnancy

Play!

**DASH MASTER: Youth Powered Design**

Do you want to know how you can apply design thinking to improve health outcomes? Play this game to learn more about the grappling challenges of GBV and HIV that youth frequently face, and how design thinking can mitigate these

Play!

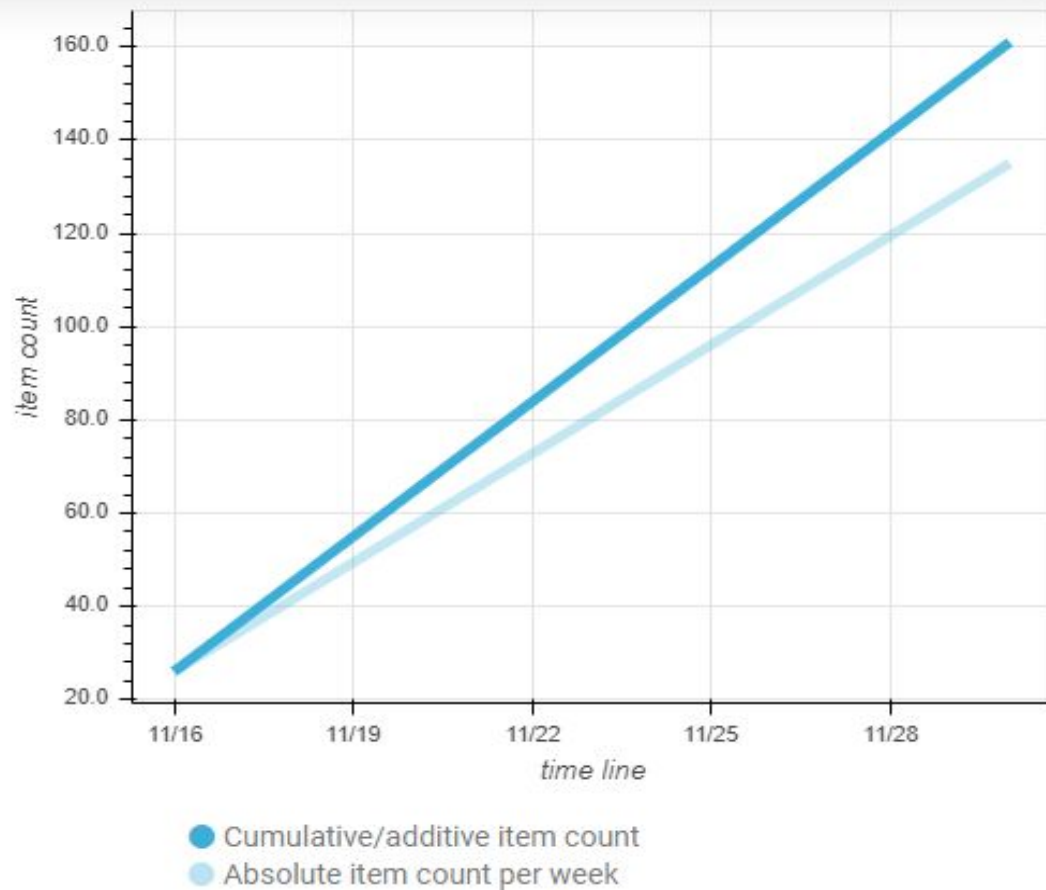
**DASH MASTER: Youth Powered Design LEVEL 2**

This level is all about applying the design thinking skills you learned in level 1, and seeing how to meaningfully engage youth and participate in advocacy and public campaigning around ASRH

Play!

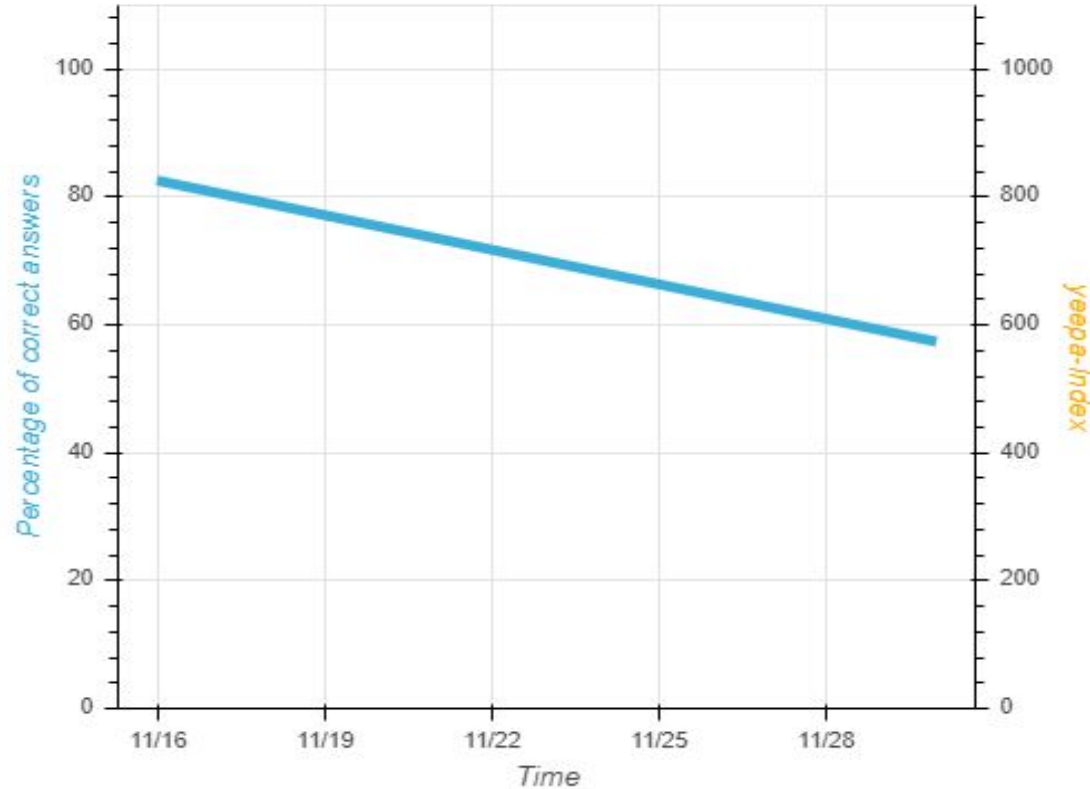
## Usage

### Comprehensive Sexuality Education Game



Since its launch, Dash Master Comprehensive Sexuality Education has been played over 160 times

LEARNING CURVE OVER TIME



The percentage of correct answer for Comprehensive Sexuality Education has decreased from 85% to 59%

## How Well Were Questions Answered for Level 1?

### Comprehensive Sexuality Education Game

What is CSE?				
1803	100.0%	3.0s	100.0%	
In what ways does CSE reduce Gender Based Violence?				
1805	100.0%	2.8s	100.0%	
What are some of the topics that CSE cover?				
1806	100.0%	4.6s	100.0%	
What other names does CSE go by?				
1807	100.0%	21.1s	100.0%	
Comprehensive sexuality education must do the following EXCEPT:				
1839	100.0%	2.8s	100.0%	

The gamers answered questions around the value and importance of Comprehensive Sexuality Education most correctly

A team of youth programmers brainstormed ideas to include on the CSE curriculum. Which design thinking stage does this fall under

1846 66.7% 3.7s 66.7%

Which of the following are relevant sources of inspiration when designing a CSE curriculum?

1847 50.0% 14.9s 50.0%

Which of these are practical ways of creating meaningful youth-adult partnerships in designing campaigns around CSE?

1886 25.0% 4.4s 75.0%

Which of the following are relevant sources of inspiration when designing a CSE curriculum?

1847 50.0% 14.9s 50.0%

The gamers answered questions on developing a framework for implementing CSE using design thinking least correctly

## Responses to Survey Questions: Level 1

### Comprehensive Sexuality Education Game

Survey questions to help to identify the motivators and factors that would contribute to an effective implementation of CSE

1784

100.0%

Does religion contribute to CSE?



Overall result	%	Count	Given Answer
	100.0%	2	Yes
	0.0%	0	No

Survey questions to helps program implementers identify areas of focus for effective youth programs

1881

50.0%

Imagine that you are part of a youth task force assigned to conduct HCD processes to improve CSE for youth in your community. What areas would you focus on?

Overall result	%	Count	Given Answer
	0.0%	0	a.) Work with the Ministry of Education to incorporated youth friendly CSE curriculum for school going children
	50.0%	1	b.) Work with the Ministry of Health for more gender focused programming for youth to reduce rates of unintended pregnancies, STIs etc.
	0.0%	0	c.) To build community programs for youth that help improve agency of youth both in and out of school
	50.0%	1	d.) To partner with churches and other religious groups to dispel myths and fake news about contraception etc. that serve as barriers to improving social economic and health outcomes of youth

## Social Media Analytics

### Comprehensive Sexuality Education Game

#### Twitter



Impressions	Engagements
378	30
410	16
175	6
425	29
1388	81

#### Instagram



Stories reached	325
Post reach	275

#### Facebook Live Gaming Sessions



82 people reached
39 Likes, comments and shares

## KEY GAMING HIGHLIGHTS

- We've launched **4 health games**; HIV prevention and care, Youth Powered Design, Teenage Pregnancy Prevention and Comprehensive Sexuality Education within 6 months in 2020
- To **extend the impact of gaming**, we launched the Youth Powered Design Game and Teenage Pregnancy Prevention Game on International Youth Day 2020 and World Contraception Day 2020 respectively
- We have been working with the **following 9 partners** to implement gaming and incorporate it into their programming on ASRH: YP Foundation, MenEngage Africa, Y-ACT, Deluded Bros Inc, Big Dream, Outright Namibia, Restless Development (India), Restless Development (Tanzania), and Maisha Youth
- Over 280 gaming questions have been played over 10,000 times
- Youth Powered Design game had the highest knowledge index of 85% having been played over 3500 times
- We successfully incorporated gaming into different modalities (webinar on the International Day of the Girl 2020 in partnership with Amref Health)
- Geographically, East Africa had the highest number of active players and registered users

## LESSONS LEARNT

- Consistent engagement with gaming partners and stakeholders contributes to their commitment and coordination into the program
- Beta testing for each gaming level allows the programmers identify weak points and undertake iteration before each launch
- Gaming is most cost effective when integrated into existing workshops, trainings, programmes and curriculum
- Key motivators and incentives highly vary by demographic, affecting usage and retention
- Implementers and managers must include resource requirements to maintain, motivate and scale-up the use of gaming in the dramaturgy and implementation plan
- Offline access to the platform is key for reaching vulnerable and at-risk gamers from remote and low-resource settings

- Implementing HCD process is important in identifying the gaming personas and addressing their gaming needs, motivations and aspirations. We undertook a HCD process and these were the gaming personas identified:



**Gaming enthusiast** - A gamer in the true sense. Always the first to test out new games (early adopter) and has an appetite for winning!



**Curious Dabbler** - Curious at first, this person wants to know the latest and tries everything; however, he/she is quick to fall off the bandwagon.



**Indifferent Disbeliever** - Not convinced that knowledge can be acquired through gaming.



**Vulnerable In-access** - Due to lack of access to technology they are hard to reach through gaming.

## NEXT STEPS & APPLYING LESSONS LEARNED

- Transitioning implementation of gaming to partners who closely work with the personas
- Considering off-line modalities and other dissemination methods to reach the vulnerable demographic to make a bigger impact
- Re-designing gaming dramaturgies for different use cases to include iterative and continuous HCD processes as well as deliberate, contextualized incentive mechanisms
- Realizing that gaming may not provide a generic solution to all partners; thus, considering engaging them individually to deliberately meet their needs and concerns
- Changing the strategy to identify our gaming personas and their key motivations
- Identifying a tool to measure the impact of these games beyond the platform





HCD EXCHANGE

# THANK YOU

For enquiries and feedback  
email: [magc@hcdexchange.org](mailto:magc@hcdexchange.org)

Image Credit: Yagazie Emezi/Getty Images/Images of Empowerment