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ELIZABETH THOMAS - OCTOBER 2022

www.deafkidzinternational.org



"I FEEL STRONG & POWERFUL":

EVALUATION OF DEAFKIDZ DEFENDERS PILOT

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EXECUTIVE SUMMARY

DeafKidz Defenders is a games-based safeguarding intervention for deaf children aged 7 – 11 years old. The intervention is delivered in classrooms through online animations and games, with offline content delivered by teachers. DeafKidz Defenders (DK Defenders) contains seven themes covering different types of online and offline abuse, and key protective behaviours.

The programme was piloted across 10 schools in Pakistan and South Africa between May and September 2022. This report presents the findings of the pilot evaluation. The evaluation was designed to identify what impact DeafKidz Defenders (DK Defenders) had on the children who received it, how it affected adults around the children and how the different programme elements contributed to this impact. It also identified lessons on implementation through the chosen school-based model.

Impact: Children start with very limited knowledge, but DK Defenders increases children ability to recognise abuse, say no and seek help

Before starting the programme, children had very little knowledge of different types of abuse and suitable protective behaviours. The evaluation found a clear and statistically significant increase in children's knowledge after completing the DK Defenders sessions. Over 90% of children increased their knowledge. Following the sessions, they were able to recall and apply the key behaviour messages – Say Stop and Tell a Trusted Adult – to different abuse scenarios. Children's ability to recognise different types of abuse also increased.

Impact: Children's educational experiences and communication abilities are the main barriers to learning

Children who had most difficulty learning and applying the DK Defenders messages were those that had less sign language fluency, and fewer language skills due to language deprivation. Factors that had some impact included experiences with technology and general life experience. Children's gender, age and country had least impact on learning.









IT HELPED THE CHILDREN UNDERSTAND WRONG AND RIGHT.

TEACHER. SOUTH AFRICA

IT WAS VERY IMPORTANT WHAT WE LEARNT. NOW I CAN PROTECT MYSELF.

LEARNER, 13,F



I WAS AMAZED AT THE DIGNIFIED MANNER IN WHICH THE SUBJECT WAS PRESENTED TO ADOLESCENT CHILDREN.

PARENT

Programme elements: DK Defenders Animations and games are powerful catalysts for learning

The online materials led to learning by supporting children's: understanding of the messages, confidence in learning, sense of belonging and engagement with the content of the sessions. The animations, which contain no oral or written language were highly effective at generating understanding, and key for children with less language development and additional needs. The games kept children entertained and engaged in sessions.

Programme elements: best learning is achieved when online materials are combined with best teaching practices

The best learning happened when online materials and offline teaching were combined. Teachers and other session leaders found the guidance and lesson plans provided helpful. They also identified the most effective strategies for teaching DK Defenders messages to their deaf students, which fall into three categories: formative assessment, building concepts, and embodied learning.

Adults: DK Defenders can equip teachers and parents to better protect their children, but more consistent engagement is required for sustainable impact.

The school-based model proved successful for safe and effective delivery. Both teachers and non-teachers (external visitors) achieved effective learning for a wide range of deaf students with the materials provided. Teachers also reported changes in their confidence and safeguarding skills, and some parents reported changes in their mindset. Deepening engagement of both of these groups will help translate the immediate increase in children's knowledge into greater protection for deaf children in the long-term.

I. THE INTERVENTION

Background

DeafKidz Defenders (DK Defenders) was developed in 2021 by DeafKidz International (DKI) with funding from the Global Partnership and Fund to End Violence Against Children and Oak Foundation. It is a games-based intervention that aims to increase the knowledge and ability of deaf² children to recognise abuse and to know what actions to take to keep safe or get help. This includes abuse in person and online³. DK Defenders includes a series of seven (7) games and accompanying animations that present key concepts, and written guidance containing accompanying lesson plans and activities. The programme is aimed at children aged 7-11 years old.

Deaf children are three times more likely to be victims of abuse than hearing children but comprehensive scoping by DeafKidz International found few resources available for deaf children for them to learn what online or offline abuse is, and appropriate ways to protect themselves and seek help. Resources that were identified were not accessible enough, being either textheavy, offered in British Sign Language or requiring use of sound.

Deaf children often experience additional barriers to learning reading and writing skills in their native language due to a poor language environment as they are growing up (Rowley 2020) and compounding factors such as late entry to a specialist deaf school. This means that relying on written text presents significant cognitive barriers. Deaf children who have less developed language skills may be doubly vulnerable as they struggle both to learn about safeguarding and disclose any abuse they experience.

DK Defenders was therefore designed – by deaf people – to be understood by as many deaf children as possible, using animations and games that contain minimal written language and instead use visuals to convey meaning. A prototype game, funded by Comic Relief's Tech for Good and the Paul Hamlyn Foundation, was developed and tested with a focus group of children aged 5 – 10. The prototype, one game focused on teaching the 'say no' consent message, tested positively. Following proof of concept, DKI was commissioned by Oak Foundation to develop a series of games teaching COVID safety messages. The development and testing of these early games informed the development of the DK Defenders toolkit.

² The generic term 'deaf' is used throughout this document to include anyone diagnosed with a hearing loss, from mild through to profoundly deaf

³ The term 'online abuse' will be used throughout this report to refer to all forms of contact that happen through the internet – whether through apps, browser, or games, and across any device – that harm a child. This includes online sexual abuse and exploitation, grooming, emotional abuse and bullying. This is also sometimes elsewhere referred to as 'technology-assisted abuse'.







CHILDREN LEARN THROUGH PLAY, DIFFICULT CONCEPTS AND CLEARING THE AIR ABOUT MYTHS AND MISCONCEPTIONS IN A POSITIVE AND SUPPORTIVE MANNER WAS MADE EASY WITH THE DK DEFENDERS PROGRAM.

TEACHER

Design challenges

The process of designing the intervention, and particularly the online materials, presented several challenges, including:

- How to present sensitive and nuanced subjects without text, sound or sign language only gestures or expressions?
- How to present topics of abuse without distressing children?
- How to ensure children would use the materials only at a time and place where they could access appropriate support from an adult if they felt worried, if they wanted to discuss the topics further or if they wanted to make a disclosure?
- How to engage children in a way that was fun and enjoyable, while conveying serious and important messages?
- How to make all materials as universally appropriate and appealing as possible?

These decisions guided development of materials and evaluation questions regarding to what extent these objectives were achieved.

Materials

3.

The DK Defenders toolkit contains:

- I. Online materials: Seven games, with seven animations
- 2. Written materials: Written guidance for teachers

The toolkit guides teaching of seven key themes. The seven themes represent key messages around the knowledge and protective behaviours children should learn:

- I. Pupils learn to turn to a **Trusted Adult** if they feel unsafe.
- 2. Pupils learn to Say Stop if someone is doing something that makes them feel unsafe
- 3. Pupils learn the difference between a 'Good Secret' and a 'Bad Secret'
- 4. Pupils learn that their **body belongs to them** and than no one should touch their body without consent
- 5. Pupils learn that taking and showing sexual images is sexual abuse.
- Pupils learn what to do if they witness or experience
 Online Bullying.
- 7. Pupils learn that there are imposters online.

The first four themes (Trusted Adult, Saying Stop, Keeping Secrets, and Private Body Parts) are intended to teach children core knowledge and skills. The final three (Cyber Bullying, Indecent Pictures/Videos, and Impostors Online/Grooming) build on these skills and apply them particularly to online abuse risk scenarios.



(I) Online materials

The online/digital materials contain for each theme:

- A short (30-45 second) animation that explains the key message of that theme with no written or oral language
- An interactive game that reinforces the theme's message
- Real world scenarios that give the child a chance to make decisions based on what they've learnt in the previous two elements

The online materials were designed to be used in browsers on laptops as this was the most common type of technology in schools across different contexts, and the games specifications were not suitable for use on mobile phones. They were also designed to function on low bandwidth internet.

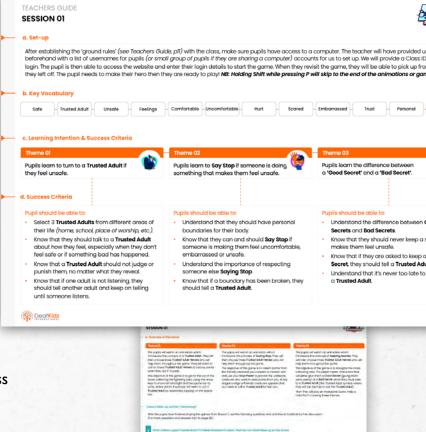
(2) Written guidance for teachers

Written guidance is provided for teachers that includes two sections:

- Overview of DK Defenders and safeguarding practices
- Lesson plans

The guidance suggests dividing content into three sessions of 90-120 minutes each that incorporate teaching, classroom activities and use of the games and videos. The lesson plans provide detailed guidance for each session including learning outcomes, success criteria, and key vocabulary. They also include suggested whole-class activities to support learning, and paperbased activities for children to complete individually. Accompanying resources such as worksheets are also provided. The session structure suggested in lesson plans is to use online materials followed by whole-class or individual activities. Figure 1 Example Lesson Plan from Teachers' Guide





You can talk to them about anything you might be thinking

Delivery model

As mentioned above, a key concern for design was keeping children safe while they accessed DK Defenders online materials, and afterwards. This was in case they felt any distress during sessions, either from fear of experiencing abuse in future or from previous abuse they may have experienced. It was also to ensure children had an adult to disclose to should they need to. This adult would need to be able to communicate with the child and know how to appropriately handle a disclosure.

For that reason, DK Defenders was designed to be delivered in a school environment, with teachers, teaching assistants or other school staff teaching the key themes in children's first language (sign language). In this way sensitive content would be delivered in a familiar environment with safeguarding protocols in place, where children could safely discuss topics and have any possible disclosures handled appropriately both during and after sessions. Teachers in pilot schools receive training and support from local implementation partners.

The school-based delivery model offered further benefits, including:

- Allowing peer learning and fun from playing alongside classmates
- Allowing children to ask for clarification from teachers
- Allowing teachers to check children have understood and address any misconceptions
- Allowing for controlled piloting with robust evaluation and learning
- Allowing controlled scaling for quality delivery
- · Providing model sustainability.

SUMMARY DK Defenders combines many innovative elements in safeguarding programming:

- as a technology-assisted intervention
- as a games-based intervention
- being specifically designed to meet the needs of deaf children

Though small-scale testing had been previously carried out of the technological aspects and proof of concept achieved, the pilot was the first time DK Defenders would be implemented as a complete package used by children and teachers in real classrooms. An evaluation of the pilot was commissioned to measure the extent to which DK Defenders achieved its aims, who for, and under what conditions.





2. THE EVALUATION

Background

In September 2021, DeafKidz International appointed an external evaluation, monitoring and research consultant carry out an evaluation of the DK Defenders pilot. The programme is funded through joint funding from the EndViolence Project and the Oak Foundation. The pilot ran from May – September 2022.

Evaluation aims

DK Defenders aims to increase deaf children's knowledge around what abuse looks like and what to do when they recognise it. By increasing this knowledge, DK Defenders is designed to equip children to recognise and report abuse if it happens. The evaluation aimed to identify 'when', 'how' and 'for who' DK Defenders is able to achieve these outcomes. It also aimed to test suitability and appeal of the games and accompanying materials to their target audiences (children and teachers).

The evaluation combined elements of outcomes evaluation with those of implementation evaluation. Evaluation of implementation was required to capture how DK Defenders was delivered across different sites, the feasibility of implementation in different contexts, and how these factors may impact on outcomes.

The evaluation had a wide scope to provide enough evidence on the effects and implementation of these new elements.

Research questions

- What factors affect engagement in the target population (deaf children aged 7-11)?
- To what extent do deaf children who complete the games experience changes in their knowledge and behaviour?
- To what extent do the various programme elements contribute to engagement and outcomes for children?
- How does engagement and outcomes differ by subgroup characteristics (e.g. age, gender)?
- What variations are there in delivery, and what effects do these have on engagement and outcomes?
- What outcomes if any are reported by teachers and other stakeholders?

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• Are any negative outcomes identified?

INTRODUCING GAMES TO SUPPORT LIFE SKILLS-BASED EDUCATION FOR DEAF CHILDREN WAS A MASTERSTROKE!

PRINCIPAL

Methods

The evaluation used both qualitative and quantitative methods to answer the range of research questions:

Children's knowledge assessment	A sample of children (n=81) were assessed before and after the programme using a brief, bespoke measure testing children's knowledge of abuse concepts and protective behaviours on a 4-point scale (see below).
Teacher survey	A sample of teachers (n=56) completed surveys before and after delivering the programme. The surveys gauged teachers' levels of knowledge and confidence in relation to safeguarding, their experiences of delivering DK Defenders and the outcomes they report for their classes.
Observations	Structured observations (n=37) were carried out of a sample of sessions by local Evaluation Coordinators (Pakistan), non-teaching partner staff (South Africa) and the Lead Evaluator (South Africa).
Children's focus groups	Short, structured focus groups (n=8) were carried out with a sample of children. Children were invited to give their opinion on DK Defenders through interactive activities and signed discussion, and changes in knowledge were assessed through scenario-based discussions.
Parent survey	A short survey was given to parents to assess their confidence in safeguarding their children and their opinions of DK Defenders (n=34). In Pakistan, the survey was translated into Urdu and further direct discussion between local Evaluation Coordinator and parents supplemented survey data.

Data was collected by local implementation partners using tools developed by the Evaluator. This remote data collection was supplemented by an Evaluator visit to four (4) participating schools in South Africa which included: observations of DK Defenders sessions and a teacher workshop, children's focus groups and questioning children during sessions, and interviews with school staff (n=6) and local partners (n=3) who had led implementation. Data from Pakistan was supplemented through an additional online focus group with teachers (n=5) and discussions with the local Evaluation Coordinators. In most instances, an interpreter was used to translate South African or Pakistan Sign Language into the evaluator's mother tongue; some observations were carried out directly by deaf staff.







Measuring children's outcomes

Careful consideration was given to appropriate and rigorous ways to carry out data collection with deaf children, young people and adults. Measurement of children's outcomes in safeguarding interventions is often done through use of standardised measure. These were not considered appropriate for this context for several reasons including lack of validation with deaf populations or in either target country, and unsuitable format for children with low literacy levels.

Tools used to collect data on children's outcomes in this evaluation were designed to test, as far as possible, the same dimensions as those captured by standardised measures commonly used in safeguarding intervention evaluations (e.g. McElearney et al. 2021, Stanley et al. 2021). The main mode of assessing knowledge and possible behaviour change – through written assessment, focus groups and in-session questioning/observations - was through the use of scenarios, and aimed to capture a range of evidence around children's ability to:

- Recognise abuse, or unsafe situations (as in Tutty 2019)
- Recall appropriate protective behaviours (as in Wurtele et al. 1986)
- Carry out those behaviours in an unsafe situation, or "self-efficacy" (as in Dake et al. 2003)

Data on children's learning was also collected through session observations, interviews with teachers and session leaders, a teacher survey and focus groups with children.

> Detail on sampling, analysis and interpretation of quantitative and qualitative data will be summarised in a separate Technical Report available on request from the author or DeafKidz International from January 2023.



3. THE PILOT

DK Defenders was piloted from May – September 2022 in 10 schools across Pakistan and South Africa. The pilot programme was delivered to over 600 children ranging from 5 – 15 years old. Schools were engaged through local implementation partners: DeafReach in Pakistan and Thrive in (Durban) South Africa. All schools engaged were enrolled in the evaluation. Delivery varied slightly between countries but implementation exceeded targets and provided all necessary data for the evaluation.

Pilot summary

LOCATION	PAKISTAN	SOUTH AFRICA
	 Hyderabad @ Karachi @ Rashidabad @ Sukkur 	School 1 School 2 School 3 (School 4 School 5 School 6
SCHOOLS REACHED (TYPE)	4 (day)	6 (day and residential)
NUMBER OF CHILDREN REACHED	318	302
AGE RANGE	7 – 11 years old	5-15 years old
DELIVERY MODEL	Teacher-led sessions	Partner/volunteer-led sessions

DK Defenders was piloted with 620 children in total. Most children were aged 7 - 9 years old. Implementation in South Africa reached children and teenagers outside the targeted age range (7 - 11 years old), providing good insight into how age may or may not affect how children respond to and learn from DK Defenders.

School engagement and delivery

Recruitment of schools to the pilot was carried out by local implementation partners. The planned model for recruitment to and delivery of pilot is shown in Fig. 2.

Figure 2 Intended delivery model.

Local partner recruits schools

Teachers receive training

Teachers deliver DK Defenders sesions

The different relationship between partners and schools resulted in two different delivery models during the pilot.

The partner organisation in Pakistan – DeafReach – manages a chain of specialist deaf schools through its parent foundation Family Educational Services Foundation (FESF). Four schools were selected across four different locations: Hyderabad, Karachi, Rashidabad and Sukkur. Teachers and classes were enrolled in the pilot by central management. Teachers of grades that fell within the target age range received a remote workshop led by DeafKidz International programme staff and the games developers and the written guidance.

Teachers then delivered the DK Defenders sessions to their own classes and/or smaller groups of children of similar ages to their own classes. Forty-six percent (46%) of children who participated in the pilot were girls, and fifty-four (54%) boys.



STUDENTS WERE INTRIGUED AND ENGROSSED IN LEARNING KEY CONCEPTS THROUGH PLAY. PRINCIPAL

Deat Rea Schools | Training Centers | C

Hyderabad 🔵 Karachi 🔴 Rashidabad 🔶 Sukkur

The partner organisation in South Africa – Thrive – is a parent-led organisation providing support to deaf children and their families to increase wellbeing of deaf children in the Durban area (Kwa-Zulu Natal). The organisation recruited a total of 6 schools to the pilot individually, by approaching those that they had previously worked with and establishing relationships with new schools.

The differences in recruitment in South Africa led to a slightly different implementation model.

The original expectation was that the local implementation team would carry out in-person workshops for teachers and teachers would then lead delivery with their classes.

Engaging schools – particularly those with no prior relationship to Thrive – required contact with multiple members of staff to secure buy-in, access and practical organisation. This process placed significant time pressure on achieving implementation within the pilot period. To guarantee delivery of the pilot the implementation team adapted, delivering - in most cases - an in-person workshop to teachers and delivering all DK Defenders sessions to children themselves with – in some cases – teaching staff present and observing.

The Thrive implementation team comprised volunteers with mixed personal and professional experiences with deaf children, either as parents of a deaf child or as a professional (social worker) working with deaf children. For this reason, this report refers to 'session leaders' as well as teachers when describing the adults delivering DK Defenders during the pilot.

The evaluation was designed to test DK Defenders as delivered in the model described above in Figure 2. It nevertheless adapted to include both models. The evaluation was not designed to test which delivery model, or way of delivering, was more effective. Any differences in impact cannot be attributed to differences in these models, which were implemented in different cultural, social and pedagogic environments. Due to the implementation differences, it was also not possible to test fidelity against one model, as implementation evaluations often aim to do.

The evaluation did, however, collect data on how the different models worked 'on the ground', and what were the strengths and challenges of each. This has generated rich learning around:

- How implementation differences may affect children's learning
- How they might impact teachers and parents differently
- What implications might be for scaling

JHRIVE.



This learning – shared in the relevant Findings and Recommendations sections of this report – can support decisions around how to introduce DK Defenders in other locations, and ideas for how to improve DK Defenders or how it is delivered in schools.

Sessions

Sessions (lessons) were delivered to whole classes or smaller groups of children, depending on feasibility within the school. As far as possible, the same group received all the sessions required to deliver the seven (7) key themes. The written guidance proposes a 3-session structure.

- The seven themes were delivered to groups of children across, on average, 3 sessions each lasting between 1 and 3 hours. Many sessions (39%) lasted for 4-6 hours.
- For each theme, children spent on average 19.5 minutes engaging with the online materials.
- Over the course of the 3 sessions or 7 themes children spent approximately 2 hours engaging with online materials and logged in 4 times.
- All seven themes were delivered either through offline teaching, online materials or a combination.

In nearly all sessions, offline and online materials were used together. On certain occasions, the use of offline and online materials was separated; this was either as laptops/computer rooms were not available or at the request of the evaluator, who wanted to observe differences in engagement and learning when offline and online materials were used.

Data from the teacher survey and partner interviews found that variations to session structure and scheduling were required to respond to (among other factors):

- changing school timetables
- availability of laptops and school staff members
- fluctuations in children's presence around school holidays.

Teachers, school staff and implementers nevertheless felt the 3-session structure – as suggested in the Teacher Guidance – was broadly feasible and they liked the intensity it provided.

92% of teachers and session leaders agreed or strongly agreed that the sessions as outlined in the Guidance (including offline and online materials) lasted for a suitable amount of time.













They also suggested that follow-on or repeated sessions might be divided into more manageable chunks of time e.g. delivering I theme within the space of I lesson or less. Others suggested having "DK Defenders days" where materials are delivered in a short and intensive block of time once a year. The timeframe of the evaluation did not allow for testing of children's recall beyond the end of the pilot, but teachers consistently emphasised the need to regularly repeat delivery:

Table I Responses to teacher survey (after delivery) - suggestions on repeating content for children

Responses to teacher survey (n=47) - open question on suggestions for improvement

The kids are learning a lot, I suggest they have more classes or once a month they learn about keep safe session

I suggest we have more sessions in a year with the kids.

It is a good imitative for deaf students. It must be continued in future. This session should be conducted at weekly basis.

These additional possibilities may be incorporated into the Teacher Guidance to guide teachers through different 'phases' of implementation, suggesting how to deliver an initial learning package that contains a minimum of foundational material followed by 'refresher' sessions. (See later sections for suggestions.)

Data on children's engagement and learning (shared in more detail below) supports the proposed 3-session model and suggests that children's engagement is not a barrier to longer (3 hour) sessions where regular breaks are included as per the school timetable.

Overall implementation

There were very few barriers to implementation during the pilot, with the most significant representing incidents that may be avoided when delivery timeframes are more flexible, or were cases of force majeure:

- Unpredictable fluctuation in student numbers around holidays
- Climate event (flooding)
- COVID-19-related lockdowns, and subsequent pressure on school timetables
- Public security (riots)

Implementation indicators⁴

The pilot exceeded its Key Performance Indicator in relation to reach and reached its indicators relating to engagement with online materials.

"DKI games helped make all of it so easy to understand. What our teachers were explaining using presentations and worksheets, we could see it all through games which helped me understand and relate to it easily."

Student, 11, M, Pakistan

	0		
1		I.	
6			





Indicator	Ächievement
# At least 600 deaf children pilot the digital gaming toolkit, of which 300 in South Africa.	620 children in total, of which 302 in South Africa.
# Page impressions on DK Defenders game website (5,000)	2901 unique sessions were recorded in pilot countries during the period May-Sept. (See footnote on page 67)
# At least 50% of users staying on website for 5 minutes or more playing the games	Mean session time was 1171 seconds (19.5 minutes).

SUMMARY Pilot delivery was successful both in achieving reach targets and in generating sufficient evidence to answer the key evaluation questions with breadth and depth. Overall implementation was broadly as intended, with teachers and session leaders using a combination of online and offline materials, covering all themes, and across 3-7 sessions each lasting between 1 and 6 hours. The proposed session structure and schedule was therefore validated, though the limited pilot period led to an implementation difference between Pakistan and South Africa with one key difference in terms of who delivered sessions to children. The implications of this difference in the classroom (on children's engagement and learning) and beyond

the classroom (on scaling) are explored further in the following sections.



4. THE STARTING POINT

Data showed that the children involved in the pilot started with little to no knowledge of abuse or appropriate protective behaviours. Some schools have previously taught safeguarding content, suggesting local curricula and methods for teaching safety have not been effective for these children. There is little content in local curricula about online abuse. Teachers in pilot schools are worried about their children's safety and often handle disclosures, but few have received any safeguarding training. Parents are similarly confident in keeping their children safe, but there are key barriers that suggest they are not effectively teaching their children necessary safety messages.

Evaluation questions

• To what extent do deaf children who complete the games experience changes in their knowledge and behaviour?

SCHOOLS

All schools involved in the pilot were special provision deaf schools. Some were day schools, some were residential schools – where children will stay in in-school 'hostels' during term time – and some had a mix of day and residential pupils.

Teaching took place mainly in local sign language, with some spoken language for children with hearing aids or Cochlear implants. Teachers who took part in the pilot provided an overview of the main communication methods used by children in their classes. The most common method was sign language, with children in every class involved using sign language at least partly for communication. In nearly half of classes (49%), some children used and understood speech with the aid of a hearing aid or Cochlear implant in addition to using sign language.









Good to know: deaf schools and mixed age classes

Late enrolment of a child in a deaf school – that is, starting school at a later age than the intended age range of (usually) 4-6 – may occur for several reasons. The child may receive a late diagnosis of deafness or families may not be aware of or have access to deaf schooling options. Particularly in low-resource settings, families may not have the resources to support school or transport costs, or education of other children in the family is prioritised.

Among pilot schools, some children were enrolled only at a deaf school when they were older than typical enrolment age, for example enrolling at the age of 10 instead of 5; some had previously been in mainstream schools or had no schooling whatsoever. Once enrolled, such children may be placed in a lower grade as they have not yet learnt enough sign language to access the learning at their age-appropriate grade. Classes in pilot schools – and many deaf schools in low-resource contexts – therefore have a wider range of students of different ages than mainstream schools.

Late enrolment is one of the principal reasons that most of the children's classes or groups that received DK Defenders had a range of ages, sometimes up to 7 years' difference between learners. The range of children reached in South Africa in particular was wider than the original target. Teaching to mixed age groups provides its own challenges both for class teachers and external visitors; the evaluation identified how these may be effectively overcome (see Section 6 'What works').

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THIS CHILD HAD MOVED FROM A MAINSTREAM SCHOOL AS HE COULD NOT COPE THERE, HE WAS LEARNING SIGN LANGUAGE FOR THE FIRST TIME AT 10 YEARS OLD AND HAD BEEN FEELING OVERWHELMED AND DOWN, THIS DAY WAS DIFFERENT FOR HIM - HE WAS A WINNER! [...] HE WAS FINALLY INVOLVED IN SOMETHING THAT HE COULD DO WELL, SOMETHING THAT DIDN'T REQUIRE HIM TO USE LANGUAGE AND WHERE HE COULD JUST BE HIMSELF!

DKD TEACHER

CHILDREN

Assessment of knowledge and behaviours before starting DK Defenders

Children's ability to recognise abuse and identify suitable protective behaviours were assessed using various methods before, during and after completing the DK Defenders sessions. Different types of assessment carried out all found that, before beginning DK Defenders, children had very limited ability to recognise abuse, and even less knowledge of what they should do in unsafe situations.

A sample of children (n=81) undertook a bespoke assessment with an 8-point scale (see Section 2 for more details).

Before DK Defenders children scored on average 3.3 points, or 41% correct⁵.



Table 2 Children's knowledge assessment: average scores and score ranges

Mean	Standard deviation	Median	Interquartile Range
3.3	2.5	3.0	4.0

22

There was some notable variation in scores. The data shows that the pilot cohort on average scored around 3 points, a large group of children scored 0 points and another group scored 3 points (see Fig. 2 below). Analysis found no significant differences between children of different ages, gender, or location at this point. This suggests the low score and knowledge of the group scoring 0 is less likely to be a result of these factors and more likely the result other factors not tested for. Children who received 0 points, for instance, may have received no previous safeguarding teaching while the group who received 3 points may have received some safety teaching they could draw on.

⁵ More detail on statistical analysis and interpretation of data will be available in a Technical Report available on request from the author or DeafKidz International.

Children learn through play, difficult concepts and clearing the air about myths and misconceptions in a positive and supportive manner was made easy with the DK Defenders program.

Teacher, Pakistan

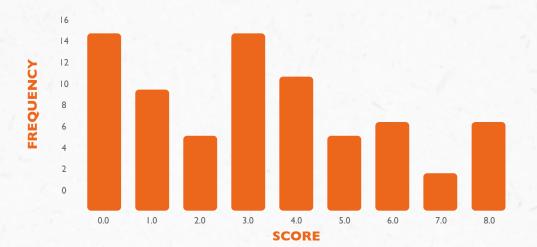


Figure 3 Children's assessment results before completing DK Defenders (n=81)

Children's knowledge assessment: scores before DK Defenders

> Almost one third of children (31%) scored only 1 point or none at all.

Although some children started with a higher level of knowledge, the majority started with very little.

Scenario-based assessment by session leaders and teachers confirmed that children were not able to consistently recognise abuse or suitable protective behaviours when given a situation adapted to their everyday context. Children who did not have the right knowledge either:

- could not provide any answers about what they would do in a given situation, or
- described inappropriate behaviours (e.g. simply "run away"), or
- drew on more recent 'safety' messages they had learnt, usually relating to COVID-19

protection measures (e.g. "mustn't touch because of COVID").

Teachers interviewed agreed that their students lacked the ability to recognise all the types of abuse they already had been or may be vulnerable to:

"They need to know what it is before they can speak about it." (Teacher, South Africa)

Ineffective delivery of key messages by teachers and parents

Evidence from teachers, school staff and parents suggests that children's knowledge levels are low because they do not consistently receive key messages from school or parents, and where they do, content or pedagogy (style of teaching) may not be suitable for their learning needs.













Some schools and teachers reported previously teaching some safeguarding messages. This was typically content embedded in the local curriculum (the local version of personal, social and health education), and done on the same schedule as it appears in the curriculum e.g. once a term. Teachers noted that the curricula they were expected to teach did not contain all relevant material – with no content around online forms of abuse, for example - and there was little room for adapting content or pedagogy to the needs of their children. Some teachers were expected, for example, to teach content from a textbook aimed at mainstream schools, though they knew this was challenging for many of their students. No examples were given of safeguarding lesson content or resources being tailored specifically to the learning and safeguarding needs of deaf children.

Discussion with parents in Pakistan and school staff in South Africa identified some key barriers to children receiving safeguarding messages from their parents or carers:

- **Difficulty communicating** Deaf children born to hearing parents in most instances rely only on basic gestures to communicate with their parents, who often have limited or no knowledge of sign language. This makes communication of even everyday concepts challenging.
- **Cultural taboos** cultural norms and taboos around gender, sex and the body prevent parents from feeling able to discuss relevant information, such as private body parts, with their children. This was particularly the case in Pakistan.

The description by children and adults of parent viewpoints in Pakistan suggests parents there are 'protective' but not necessarily 'protecting' their children, being unable or unwilling to address topics of abuse and the body effectively.

"I never knew much about these topics because no one told me anything in detail. I was only told to be careful. My mother also is not good with signs and there is a communication gap between us."

Student, 12, F, Pakistan









"Initially I was cautious about the introduction of an abuse prevention program. We don't usually talk about such things at home and keep our girls protected by constantly providing them with a safe space and restricted movement and interaction with the opposite gender."

Mother of deaf student, Pakistan

"Boys are also subject to abuse and it is covered up due to shame and ego and manliness concepts. They suffer and become socially isolated and withdrawn."

Father of deaf student, Pakistan

"Discussing sexual abuse, calling out an abusive adult and talking about personal safety is a big taboo in our culture and specially discussing it with children."

Parent of deaf student, Pakistan

It was noted that children in residential schools also spend less time with their parents, possibly affecting both their development of common communication methods and opportunities to teach or reinforce key messages at home.

Vulnerability to abuse

Although children sometimes struggle to recognise and report it, school staff confirmed that their students are subject to a range of abuse, including:

- Peer abuse: abuse from hearing children in the local community, abuse (bullying, inappropriate touching) from other children within school
- · Physical abuse, including sexual abuse
- Emotional abuse, including coercion.

Part of the reason children themselves are not recognising these abuses as such is the prevalence of it in their lives:

"Because they are faced with different kinds of abuse, they tend to normalise it...they then withhold it and they don't speak out." Principal, South Africa

Teachers of teenagers (12 and older) felt their students were engaging in some risky behaviours, such as accepting lifts from older teenagers they did not know well. School staff also highlighted the low self-worth of their students as a result of the abuse and exclusion they experienced from a young age, particularly among girls. No examples of online abuse were shared, but staff felt this was certainly relevant to children who had access to and used a range of technology such as mobile phones.



TEACHERS

Handling safeguarding issues

School staff became aware of the abuse children might have experienced either because a child reported it or, more often, because they 'overheard' children discussing experiences between themselves or staff themselves identified signs of possible harm.

Teachers felt they handled many safeguarding incidents.

- > 94% of teachers surveyed had handled at least one disclosure from a child in the past year.
- > Nearly a fifth (17%) had received 5 or more disclosures in the past year.

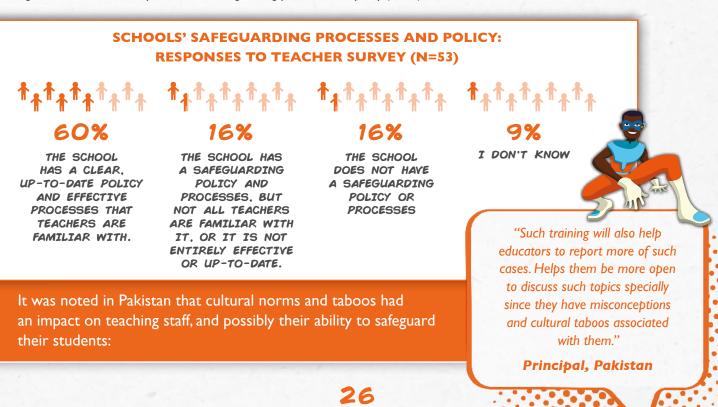
Unsurprisingly, teachers reported high levels of concern for their students:

> 94% are always or nearly always concerned about the safety of the children in their class.

There is a mixed picture about teachers' capacity to handle concerns and disclosures. Many teachers reported feeling confident handling safeguarding concerns: 46% felt comfortable or very comfortable handling disclosures before starting DK Defenders.

However, almost half (49%) have never had any training or professional development on safeguarding and in some schools, policies were not documented. Forty percent (40%) of teachers surveyed were not able to identify a clear school safeguarding policy they were familiar with. Teachers spoken to in workshops or interviews described a set of standard practices they would use to process safeguarding concerns, alongside or instead of a formal written policy. These practices differed slightly between schools e.g. the point at which social workers may be involved. Teachers who had not received training based their decisions on prior experience, relationship with the child and the practices modelled by other staff in their schools. Their confidence therefore seems to come from familiarity with their school's general safeguarding practices and the frequency with which they processed concerns.

Figure 4 Teacher familiarity with school safeguarding processes and policy (n=53)



Teaching safeguarding messages

Interviews with school staff and implementation partners suggests that most schools have taught some safety messages at some point. School leaders and teachers explained that – across both countries – these were usually drawn from the local curriculum and sat within the local equivalent of Personal, Social, Health and Economic (PSHE) education, or 'Life Skills'. The curricula aimed at the target age range covered bullying, and sometimes consent, and physical and emotional abuse and neglect. Teachers and leaders nevertheless highlighted some key issues:

- Difficulty finding time in the school timetable/curriculum, with Life Skills more likely to be 'squeezed out' in favour of other subjects
- Having to use a mandated curriculum
- Methods and materials provided or mandated e.g. text-heavy textbooks not being suitable for learning by deaf children and/or being beyond their language level
- Materials available being out of date and containing no online safety messages
- No resources available that were created or adapted for deaf children

Teachers reported high comfort levels with teaching safeguarding content across both countries, even prior to DK Defenders:

- 64% felt comfortable discussing sensitive issues with children in their class
- 52% felt comfortable teaching their class about what to do if they think they had experienced abuse
- > 56% felt comfortable teaching their class about keeping safe online.

Discussion with school leaders in Pakistan nevertheless suggested that teachers there might be over-reporting their confidence levels prior to the programme, as the school leaders or other staff knew from direct discussion with teachers that they had concerns at the beginning of the pilot.

Teachers' confidence in teaching these subjects may also stem from experience of delivering safety teaching previously even with low-quality resources, in the same way their confidence handling disclosures may stem from frequently doing so, despite a lack of formal training. Confidence at the starting point – even where it is not over-reported – does not therefore mean teachers might not benefit from the DK Defenders implementation in their schools.















How children handle safeguarding in their schools

When children reported a worry to a member of school staff, they were more likely to do so to a deaf member of staff.

Observations of DK Defenders sessions during the pilot would find that students often identified a teacher as their first Trusted Adult, and sometimes a preferred staff member – that they felt more rapport with – over their own class teacher.

This points to cultural and pedagogic differences within and between

schools noted also by external visitors to schools, including session leaders, programme implementers and evaluators. The differences could be observed in the relationship between children and school staff, engagement of senior leadership with the programme as a whole, and how schools facilitated programme implementation. Interrogating such differences were beyond the practical and political scope of the evaluation, but nevertheless helped to interpret possible advantage and disadvantages of different delivery models (see Section 7 'Beyond the classroom').

Good to know: hearing and deaf educators

Pilot schools employ a mixture of deaf and hearing teaching staff. Hearing teaching staff are expected to understand and use local sign language (South African or Pakistan Sign Language) and have varying levels of signing ability depending on how long they have been in post. Deaf staff teach in local sign language. In pilot schools in South Africa, hearing teachers are often supported by deaf teaching assistants who support children's learning by re-explaining concepts as necessary. Some classes in Pakistan used interpreters in place of teaching assistants.

DK Defenders was delivered during the pilot by a range of hearing and deaf session leaders. In Pakistan, hearing and deaf class teachers delivered the sessions, either alone or with the aid of deaf teaching assistant or interpreter (as lessons are normally delivered). In South Africa, where a different delivery model was used, sessions were delivered by a variety of team structures involving a combination of: hearing session leader, hearing volunteers, deaf session leader, sign language interpreter. Hearing leaders and volunteers had some sign language, and all leaders and volunteers had experience working with or supporting deaf children. Where possible, and in the majority of sessions, the same interpreter was used.

DK Defenders guidance recommends that the sessions are delivered by deaf session leaders wherever possible, but does not require it. The reasons for schools employing a mixture of deaf and hearing staff are complex and, within the intended delivery model, beyond the control of DeafKidz International. Consequently, the evaluation did not intend to compare effectiveness of delivery by deaf or hearing session leaders, or mixed teams. Any differences in implementation or impact have been captured in broader evidence around how implementation varied and how this might affect impact.

"There's a rapport between a deaf person and a deaf person. So [the children] come to us first."

> Deaf teacher, South Africa

SUMMARY Analysis of children's knowledge and experiences before receiving DK Defenders shows a low starting point reflecting limited knowledge of abuse and suitable protective behaviours. This is despite some messaging from teachers and parents.

This gap supports the reason for developing an intervention specifically designed for deaf children, and highlights the ineffectiveness of 'traditional' methods of teaching safeguarding to deaf children. It also suggests DK Defenders could have large impact, as most children are starting from a place of minimal to no knowledge of what abuse is or steps they can take to get help. Areas where the programme does not achieve such impact – despite this need – will be explored to understand why this is and how the programme can be adapted in future.

Analysis of the knowledge, experiences and attitudes of the adults around the child identify both factors that present a good foundation to build on but also factors that may constrain the programme's impact on children's safety in their current environments.

On the one hand, teachers and parents are worried about their children and aware of their vulnerability. However, they do not always have the understanding, resources or mindset required to effectively teach safeguarding messages or respond to children's concerns or disclosures.

This may limit the impact DK Defenders has. Analysis of outcomes at programme end was implemented also tracked changes in adults to see if this changed following DK Defenders.





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5. THE IMPACT ON CHILDREN

Evidence from all sources showed that children who completed DK Defenders had a strong and immediate improvement in their ability to understanding and recall the key safety messages. Their learning was demonstrated through increased recognition of abuse and new knowledge of protective behaviours. Children also started to apply their new knowledge of protective behaviours when given new scenarios and questioned situations they had already experienced unprompted, suggesting their learning may be used to keep themselves safer. The messages most clearly picked up by children represent the 'core' messages of DK Defenders: Say Stop and (tell a) Trusted Adult. Some children struggled to recall the more nuanced/advanced messages. Several reasons why some children found this harder were identified.



Evaluation questions

- To what extent do deaf children who complete the games experience changes in their knowledge and behaviour?
- To what extent do the various programme elements contribute to engagement and outcomes for children?
- How do engagement and outcomes differ by subgroup characteristics (e.g. age, gender)?
- What variations are there in delivery, and what effects do these have on engagement and outcomes?
- Are any negative outcomes identified?

How much children learnt

Section 4 'The starting point' described the very limited knowledge children of all ages had prior to receiving DK Defenders. A sample of children (n=81) were assessed using the bespoke assessment tool that measured their ability to recognise abuse and identify appropriate protective behaviours across four key domains.

The assessment results show a clear and statistically significant⁶ increase in children's knowledge after children completed the DK Defenders sessions.







Figure 5 Children's assessment results before and after completing DK Defenders (n=81)

CHILDREN'S KNOWLEDGE ASSESSMENT: MEAN SCORES BEFORE AND AFTER DK DEFENDERS



- > 91% of children assessed had increased their knowledge after completing DK Defenders
- > Over half (56%) more than doubled their assessment scores.

Good to know: methods for assessing deaf children's knowledge

Multiple forms of assessment were required to gauge a reliable understanding of how much children had learnt in the DK Defenders sessions. When questioned directly, many children felt a pressure to perform even though they had difficulty understanding questions containing concepts such as 'how', 'why' and 'before/after'. Focus groups therefore focused on 'what' and 'which' questions/activities and then used scenarios and a ''what would you do?'' question to assess children's thinking.

The bespoke assessment tool was a written assessment and, although teachers/session leaders were encouraged to deliver it through signing and capture the child's responses separately, some teachers felt the children were worried by what appeared to be a written text. The tool was helpful in avoiding the effects of social desirability bias (children copying what their classmates do) but could only provide a limited understanding of overall programme effects.

Evaluators, teachers and implementation partners all found that observation was a powerful tool in assessing children's understanding. Observers could assess the level of understanding by watching facial expressions, as well as interaction with adults, other children and materials, and role play or other activities carried out. This data was recorded in an Observation Template. Data from the different methods was triangulated to identify how and when children had strongest and weakest engagement and understanding during sessions.

Teachers also reported changes in their children's knowledge and behaviours following the DK Defenders sessions, with improvements in both their likelihood to recognise abuse and report it. The greatest change reported by teachers was children's ability to recognise abuse in real life, which probably reflects some difficulties in teaching the online safety messages.

On a scale of I-I0, how likely do you think the children in	Before	After
your class now are to	Mean (SD)	Mean (SD)
recognise abuse or an unsafe situation in real life?	4.8 (2.1)	6.8 (2.4)
recognise abuse or an unsafe situation online?	4.6 (2.2)	6.0 (2.7)
report a worry they have or a worrying experience to an adult in school?	5.2 (2.2)	7.3 (2.1)
report a worry they have or a worrying experience to another suitable adult?	4.8 (2.0)	6.9 (2.2)

Table 3 Teacher survey responses after DK Defenders implementation with their classes (n=47)

The possibility that children were more likely to recognise abuse and report it after completing DK Defenders is supported by evidence of recall beyond the sessions, and application to different situations or scenarios.

Impact indicators (children)

The pilot exceeded its Key Performance Indicator in relation to impact on children's outcomes.

Indicator	Achievement
80% of children self-reporting that they are better	91% of children increased their ability to correctly
able to identify appropriate vs inappropriate	recognise abuse and select an appropriate
behaviour and know when and how they can say	protective behaviour (saying no and telling a
no as a result of the game	Trusted Adult) after completing DK Defenders,
	as measured through pre-post testing.

How deeply children learnt

Children demonstrated that they had not only understood and recalled the key messages but also applied it in varying ways, both when prompted and unprompted.

Children's ability to apply what they had learnt was tested through scenariobased assessments carried out by evaluators, teachers and session leaders. Scenarios given for assessment purposes were different to those used to teach the messages and tailored where possible to the children's context. Assessments during sessions and in focus groups up to a few days after sessions found that, when presented with a new scenario, children could apply what they had learnt by:

- (a) recognising what might be unsafe about the situation, and
- (b) suggesting appropriate protective behaviours (saying no, seeking help)

STUDENTS WERE INTRIGUED AND ENGROSSED IN LEARNING KEY CONCEPTS THROUGH PLAY.

PRINCIPAL

Example: recall and application of DK Defenders messages

Msebe⁷ is 11 years old and has been attending a specialist school for deaf children since she was 4. She uses South African Sign Language and is particularly strong at Maths.

Observation in DK Defenders sessions found her enthusiastic and "always looking interested and willing to put her hand up to answer questions".

When the session leader asked her to share what she had learnt in DK Defenders, she remembered

that "A trusted adult can help. If I have a problem I must tell, tell, tell Mommy, Granny, Daddy or teacher."

When the session leader gave her a new scenario, Amahle explained what to do if showed a picture of someone who was naked and it made her feel unsafe:

"It is wrong. If the person made me feel scared I would say STOP (with voice) and would run to tell my Mom about the person." If her Mum was too busy or didn't see her, Amahle said she would "tell my Dad or my Aunt or other relatives."



Unprompted application was observed when some children began to analyse situations they had previously experienced or that they came across in their everyday lives.

Sometimes this took the form of questioning for teachers and session leaders, with children seeking to understand what their new knowledge meant in relation to their past or common experiences:

"THAT SMALL GIRL SHE UNDERSTOOD THE PROGRAMME AND SHE WAS CHALLENGING WITH SO MANY QUESTIONS TO ALL OF US!"

SESSION LEADER, SOUTH AFRICA

This also took the form of disclosures. Some teachers surveyed (13%) reported receiving disclosures from children in or shortly after sessions, as may be expected for a safeguarding programme. Others also reported receiving questions from children that did not contain direct disclosures but nevertheless raised concerns.

⁷ Names have been changed.

Over a quarter (26%) of parents surveyed (n=34) also reported their children sharing concerns or worries with them for the first time after completing DK Defenders.

The evidence on children's learning and learning processes indicates that:

- · learning goes beyond immediate recall
- children **continue absorbing and reflecting on the key messages** both during and after sessions.

It also suggests the sessions may have increased children's likelihood of successfully recognising an unsafe situation and asking for help.

What messages children learnt

DK Defenders comprises seven (7) key themes or messages (see page 8), each with a corresponding animation and game. As recommended in the guidance, teachers delivered the themes in order. The first two themes – Say Stop and Tell a Trusted Adult – teach key protective behaviours (saying no and seeking help) which are then repeated in the context of all later themes. The next two – Private Body Parts and Keeping Secrets – aim to provide foundational knowledge that helps children recognise abuse. The remaining three – Cyber Bullying, Indecent Pictures/Videos, and Impostors Online – aim to help children recognise online forms of abuse specifically and apply the same suitable protective behaviours.

Observations and children's focus groups found these messages overall to be quickly absorbed and confidently repeated. They were also able to apply these messages to new scenarios given by teachers or the evaluator.

Example observation transcript

Session Leader: What is someone from your school offered you a sweet and told you to never ever tell anyone about it?

Learner: Bad, bad secret. You must tell.

Session Leader: That is exactly right - what if someone at church touched your body and made you feel uncomfortable and told you not to tell anyone about it?

Learner: I must run and tell tell

Session Leader: And before you run, what can you do, the first thing you can do?

Learner: Yes, say STOP

Session Leader: And who are the adults you can tell?

Learner: Mommy, Daddy, Cousin, Aunty, Brother.....

IS MINE.

STUDENT, 12, F

The messages most quickly and confidently recalled, and most consistently . Figure 6 Focus group activity sheet applied in assessments and in sessions, were 'Say Stop' and (tell a) 'Trusted Adult', or saying no and seeking help. When children in focus groups or observations were asked to identify their 'favourite' and, where possible, the 'most important' themes to learn, all themes were at some point identified. However, children consistently highlighted Say Stop and Trusted Adult first.

"It was very important what we learnt. Now I can protect myself." Student, 13, F, South Africa

"It helped [the children] understand wrong and right." Teacher, South Africa "My body is mine." Student, 13, MF, South Africa

"[DK Defenders] Improved the knowledge and understanding of abuse, bullying, consent. As a teacher I used abstract ideas to explain this but with the clarity and teacher training it was helpful to quantify these concepts for teachers and children alike. My students now frame their points from a place of knowledge and confidence." Teacher, Pakistan

Older children were more likely to identify the online abuse-related and picture-related messages as important for them. Teachers agreed that these were particularly important for deaf teenagers. Some observations found that teenagers might be slightly less likely to want to Tell a Trusted Adult about an online concern. Due to teenagers' positive engagement with DK Defenders, however, teachers requested additional content relating to sex and relationships specifically for them.

Theme 05

Pupils learn that taking and showing sexual images is sexual abuse.

Theme 07

Pupils learn that there are **Imposters Online**.

Teachers and observers noted that some themes contained messages that were harder for children to understand, because they were more nuanced than the child had:

- · Good Secrets Bad Secrets -some children found it harder to understand that some secrets might be acceptable (e.g. birthday surprises) while others might be unacceptable. In these instances, teachers/session leaders focused on communicating the danger of secrets.
 - Impostors Online this message required some a level of abstract thinking that some children found particularly challenging (e.g. someone not being who they say they are).









There was some concern among teachers that messages relating to technology-assisted abuse were more challenging for children without many relevant experiences to understand, and some additionally felt this made the online safety themes (Themes 5-7) unsuitable for younger children (roughly 8 or younger). The question of how age and experiences with technology impacted children's learning will be explored further below in subsection 'Why children learnt differently'.

In summary, the DK Defenders themes represent the most 'basic' of safeguarding messages and then proceed to more advanced topics. Both the content and order of themes has been validated by teachers' experiences and children's learning. Starting with messages of saying no and seeking help meets the needs of the many children starting with no prior knowledge, and can 'undo' some incorrect learning or confusion. Repeating these messages within the context of others serves to reinforce them well. The types of abuse children are taught to recognise through the first four themes are accepted by adults as relevant for their children, though there is some debate around the relevance of the online abuse themes for younger children or those not yet regularly using technology. Themes with more nuanced messages occasionally present issues for some children, but the following subsections outline why some children in particular find these messages harder and how offline teaching can help mitigate these difficulties.

Note: further examples of children's learning are captured in three case studies detailed in the Key Findings Summary Report (Thomas 2022).











Negative experiences from learning

Evaluation tools checked for any possible negative outcomes, such as increased anxiety and distress that might indicate re-traumatization (when children who have already had a traumatic experience are exposed to something that causes them to re-experience that trauma). Teachers and session leaders were also primed to monitor and report any signs of distress or concerns.

Children's experiences of the sessions themselves were almost entirely positive. Only one child found an animation – with a shadowy figure representing a threat – worrying. They were able to continue without problem with reassurance from the session leader. Children seemed positive and enthusiastic both in sessions and in follow-up focus groups, even when they had been analysing (unprompted) situations in their lives where they had previously felt uncomfortable.

Some parents (18%) felt their children were more anxious following the sessions; the same number felt their children were less anxious.

According to the teacher survey, children said something that required some form of safeguarding response in approximately 13% of sessions. School staff reported that some disclosures were also made in the days and weeks afterwards. All disclosures or concerns were handled as per school policy or protocol and school staff were happy with the overall outcome.

That teachers and/or session leaders were able to identify and follow up on concerns in an appropriate way supports the use of a school-based model. It suggests that, even where children are given free access to the games, it should be introduced first in the classroom and possibly even allow for a "cooling-off" period of a few days before children are encouraged to log in from other locations, to allow for any queries or disclosures to arise within the context of the school.



Why children learnt differently

Assessment evidence showed that most children increased their knowledge after completing the DK Defenders sessions, and evidence from observations and focus groups confirmed that children's learning included at least the two key protective behaviours (Say Stop and Trusted Adult) which they could then apply to new scenarios of possible abuse. The same data also showed that some children had greater difficulties in others in understanding, learning and applying the DK Defenders messages.

Through analysis of correlation and association, the evaluation was able to identify the factors that most affected how well a child was able to understand, recall and apply the key messages. Other evaluations of safeguarding interventions have suggested dividing content by age or developmental groups (Tutty, 2014). Some may also assume that gender has an effect: for example, that girls receive more safeguarding information as they are seen to need greater protection and would therefore have greater knowledge at baseline.

This evaluation nevertheless found that, of the factors identified, gender and age had least impact on learning while factors relating to children's prior education and language use had most impact. This highlights that deaf children's experiences and educational trajectories are markedly different to those of hearing children, and assumptions about age and learning ability need to be rethought to understand how interventions should be delivered to achieve learning and impact for deaf children.

Factors that had LEAST impact on learning:

- Gender
- Age

Gender

Statistical analysis found no significant^{*} correlation between gender and assessment results at any time point, suggesting there is little or no connection between the gender of the child and how much they learnt during the sessions.

Table 4 Results of correlation analysis between children's gender and change in scores after DK Defenders (n=81)

Gender	t	df	P
Difference (before-after scores)	-0.625	79	0.534

Some school staff felt that their deaf female students had particularly low self-esteem and that this made them more vulnerable to abuse, and this vulnerability would mean they may therefore benefit more from the intervention. While the quantitative data from the sample assessed does not suggest this was the case for the overall population of children who took part in the pilot, it may be that – in some classrooms or schools – DK Defenders could have more impact for a subgroup of students who have other vulnerabilities in addition to their disability.

Age

Statistical analysis found no significant* correlation between age and assessment results at any time point, suggesting there is little or no connection between how old a child was and how much they learnt during the sessions.

Table 5 Results of correlation analysis between children's age and change in scores after DK Defenders (n=81)

Variable		Age
Difference	Pearson's r	0.163
(before-after scores)	p-value	0.146

*p<.001

Qualitative data provides a more nuanced picture. Observations found that children as young as 6 could successfully engage with and learn the key messages from DK Defenders sessions, when supported by the right teaching strategies, and that young people up to 15 engaged enthusiastically with the animations and games. This suggests that DK Defenders is in fact suitable for a wider (particularly older) age range than it was originally intended.

The views of teachers and session leaders confirmed that DK Defenders was appropriate for and acceptable to older students. In terms of learning, observation found that the youngest children (under 6 years old) struggled to engage with offline teaching because of less developed language skills and sign language fluency. Although they engaged with the animations and games, it was not clear how much they learnt.

Within the core age group (6 and over), however, analysis of both observation and assessment data found that age as a factor by itself was not associated with how much or how well children learnt.





Factors that had SOME impact on learning:

- Experiences with tech
- Life experiences

Teachers and session leaders described some barriers to learning based on differences between DK Defenders content and children's prior experiences.

Teachers reported that some children struggled to understand the messages of the final three themes, which related to online safety, because they did not have access to or experience with the technology referenced e.g. chat functions, messaging apps, phone cameras. Some teachers additionally felt that the content should therefore not be taught for children without these experiences or those below a certain age. As noted above, however, age by itself has been considered a separate – and non-defining – factor because children's experiences with technology cut across all ages.

Interviews with implementers and children themselves suggested that children's experiences with technology were not based on age alone but rather context such as whether they attended a residential school, lived in an urban or rural area, and their family income level. Children who did not have their own devices nevertheless described accessing devices (laptops, tablets or mobiles) belonging to the adults around them including when unsupervised/without an adult knowing. It was not clear whether their teachers knew of this access. In residential schools, for instance, teachers may not be aware of children's access to tech at home though it is controlled within school.

Some teachers and session leaders used a variety of strategies to adapt teaching and 'build up' to the harder concepts as best they could, or help adapt scenarios so the same underlying concept was taught but within a context closer to the child's own (see next section 'What works'). Despite that, some still felt that these concepts were not understood quite as fully as the earlier messages.

Teachers identified some further factors relating to children's life experiences that affected how much they were able to understand the messages, including:

- Attending a residential school, and therefore having limited opportunities for interaction with children and adults outside the school
- Attending few or no leisure or extra-curricular activities.

In summary, evidence from teachers suggests that, within the first seven themes, there is also a learning gradient that is impacted not only by children's language levels and prior education, but also their experiences. To what extent this dictates which content should be taught to subgroups of children will be a question to consider in the next phase of implementation.



Factors that had MOST impact on learning:

- Level of language development, including: sign language fluency, literacy level
- Confidence communicating
- Years within deaf education
- Years in current school
- · Quality of teaching
- Level of additional needs (e.g. special education needs, autism)

Analysis of assessment and observation data found that the factors most associated with difficulties in learning the DK Defenders messages all related to children's language levels, and educational experiences and needs.

Children who had high levels of fluency – use and understanding – in their local sign language⁸ found it much easier to engage with the (offline) teaching element of the programme. It was also easier for teachers or session leaders to carry out formative assessment (checking children's understanding before moving on to the next concept or theme). These children were also observed interacting between themselves when watching the animations, playing the games and taking part in other lesson activities, including correcting or reminding each other on the content of the messages. Observation suggests these children were more likely to have a higher level of knowledge when starting the programme, even if it related to other safety messages e.g. COVID measures.

By contrast, children who had lower levels of sign language fluency and/or reading and writing ability, found it harder to understand the offline teaching. They would not have a bank of sign vocabulary and related knowledge on which the session leader could easily build concepts, and could not draw on the support of their peers as easily.







⁸ Not all deaf children globally use sign language. Some children that are hard of hearing will instead use spoken language as their primary or only communication method. However, all children who participated in the pilot – including those who used a hearing aid and had some degree of hearing – used or were learning sign language, which was the primary medium of instruction in all pilot schools.



Good to know: deaf children and language development

Most deaf children, like hearing children, are born with the potential to acquire language. Language acquisition for all children is supported by various factors e.g. family's socio-economic status, reading practices of parents and carers. Language acquisition is closely linked to literacy (reading and writing) skills. As they are unable to access spoken language in the same way, language acquisition for most deaf children needs to happen though sign language, but 90-95% of deaf children are born to hearing parents who do not know sign language. This means they often struggle to develop language skills (Rowley 2020).

Children who are not exposed to sign language struggle to develop language skills, called 'language delay' or 'language deprivation'. This in turn has an impact on other stages of development including cognitive, social and literacy skills. Children who are exposed to fluent sign language users from an early age, at home and/or at school, are more likely to have good literacy skills and other academic outcomes (lbid.).

Language deprivation is the main reason why sign language fluency, rather than age, is the strongest factor affecting how children learn in DK Defenders sessions.

The other factors that affected how much a child learnt related to their prior experiences of schooling, including: the quantity – how many years spent in school, the quality – the quality of teaching they had received in school, and the consistency – how many years spent at the same school. It is most likely these factors reflect the underlying issue of delayed language acquisition.

SUMMARY This section has summarised the factors relating to the children themselves that affected how they learnt and engaged with DK Defenders drawing on data from children's knowledge assessment, teacher and session leader interviews, and session observations combined. Observations and interviews identified, however, that the factors that did have most impact – language levels and educational experiences – affected how children engaged and learnt from the offline teaching element of the programme, but did not affect how children engaged with and learnt from the online materials. No significant differences were detected in how different children engaged with and learnt from the online materials (animations and games), apart from the very youngest (5 years old).

The following Section summarises findings on the role of each programme element – online materials and offline teaching – in generating the learning identified in this Section, and how teachers worked to overcome some of the barriers also identified above.

Factors relating to implementation that affected impact are also identified in the relevant Sections below, 'What works' (factors relating to session implementation) and 'Beyond the classroom' (factors relating to delivery models, teachers, and parents).



6. WHAT WORKS

The evaluation aimed to identify both how much and which messages children learnt – detailed in the previous Section – and how the various programme elements contributed to that learning, or 'what works' within DK Defenders. Of the different programme elements, the combination of DK Defenders animations and games with direct instruction of key concepts was the most powerful at producing learning.

The animations and games generated learning by developing understanding, maintaining high engagement, and building children's confidence. They were particularly powerful in supporting learning of children with lower language levels and/or other educational needs that made it harder for them to engage with direct teaching. Design of the online materials meant they could be used relatively easily in the classroom, though session leaders faced some challenges with hardware and Wi-Fi in schools.

The greatest impact overall was nevertheless achieved by combining use of online materials with teaching that draws on three groups of pedagogical strategies. Teacher materials supported session delivery, but tailoring to children's needs was required and teacher practice was developed as teachers taught more sessions. This has provided rich learning about how delivery can and should be adapted to increase impact, and the role that the guidance pack may play in supporting that.

Evaluation questions

- What factors affect engagement in the target population (deaf children aged 7-11)?
- To what extent do the various programme elements contribute to engagement and outcomes for children?
- What variations are there in delivery, and what effects do these have on engagement and outcomes?







What works: animations and games

The evaluation aimed to identify how the different programme elements (online materials and offline teaching) each contributed to the intervention's impact. As noted in the previous Section, difficulties that were detected in learning arose from difficulties engaging with and understanding the teaching element but no significant differences were identified in how children aged 6+ (within and above the target age range) engaged with and learnt from the online animations and games.

Evidence from session leaders and observations suggests in fact the animations and games were the catalyst for learning for the majority of children, but especially for those who faced the greatest barriers to learning described above (language deprivation, limited education and additional educational needs).

The evaluation identified four ways in which the online materials led to learning:

- I. Generating understanding
- 2. Building confidence
- 3. Creating belonging
- 4. Engaging through entertainment

I. Generating understanding

Observations and assessment that the animations in particular were vital for embedding understanding of the key messages. It was observed by teachers and evaluators that children who struggled to engage with and understand the messages through direct teaching would "light up" when they saw the animation and understood the concept fully for the first time – something they sometimes shared with the session leader. Some children could be observed acting along to the animations of their own accord. This is a powerful indication that the lack of written and oral language, and use of simple visuals that have been pre-tested on other deaf children, was the necessary ingredient for some children, and particularly those who had limited language levels and/or additional learning needs.

"One of the heart-warming experiences...was witnessing children with autism, special needs, or slow intellectual processes progressing really well after watching the animation and playing the games. Usually...they struggle with learning, and they receive content taught at a different level of understanding but with this online learning system they did exceptionally well." Session leader, South Africa

"What our teachers were explaining using presentations and worksheets, we could see it all through games which helped me understand and relate to it easily." Student, Pakistan

"When we use visuals, you can see their faces lighting up." Session Leader, South Africa

2. Building confidence

Teachers explained that their students often had low self-esteem due to experiences of social isolation, bullying and other abuse throughout their lives. Teachers and session leaders noted how children's confidence grew over the course of the DK Defenders sessions, and ascribed this to:

Feeling they had more knowledge and control over their circumstances

• Knowing they had understood the messages they were being taught

- Feeling that adults cared for them and their wellbeing (particularly where external visitors delivered sessions)
- Having a positive experience in the classroom, where they otherwise might struggle, especially where they had experience of traditional 'chalk and talk' teaching methods.

"I enjoyed playing the game and choosing my character. I feel strong and powerful now that I know how to defend myself." Student, M, Pakistan

"I remember a child who was extremely quiet on day 1 of the programme. On day 2 he walked in looking sceptical again. After teaching for a while, we announced that it was time to play some more games – his face changed immediately and a small and beautiful smile appeared, this image has stuck with me as it felt like he was finally involved in something that he could do well, something that didn't require him to use language and where he could just be himself. I heard from the teachers afterwards that he was recently moved from a mainstream school as he could not cope there, he was learning sign language for the first time at 10 years old and had been feeling overwhelmed and down, this day was different for him – he was a winner!" Session Leader, South Africa











Creating belonging

Another reason identified for children feeling positive during and after sessions was that the resources were designed for them as deaf children.

> "I have played a lot of games online but they were confusing as they were for hearing people.With DK Defenders I feel safe and prepared to deal with any challenge." Student, Pakistan

"It is designed by and for deaf people...Nuances of deaf culture, barriers, difference of printed text, the visuals, it's all been taken into account" Principal, South Africa

Children themselves noticed that the characters in the games and on the related publicity materials were both superheroes and deaf (wearing a hearing aid, for example).

They also responded very positively to the 'Hero Builder' aspect of the games, where they could tailor a character to their liking including adding hearing aids, change the skin colour and so on.

4. Engaging through entertainment

Children of all ages, from 5 to 15 years old, found the **games** entertaining. Wanting to play the games meant children engaged even with long sessions. Engagement was best with 1 or 2 children to a computer.

"The customized games delighted our students and opened the door to learning and safeguarding in a unique way." Teacher, Pakistan

Observations showed that children did not feel the performance anxiety that they normally felt during traditional 'chalk and talk' lessons while they were playing the games and animations. Better engagement and reduced pressure led to better learning.

> "Because the children were having so much fun playing the games, it seemed that they were really receptive to learning new things when it was time to introduce new topics." Session leader, South Africa



Figure 7 Photo of children engaging positively with DK Defenders games characters.



To think about: delivering through school-owned technologies

The animations and games have been designed to

Schools enrolled in the programme were expected to provide and organise use of their laptops or desktop computers, connected to Wi-Fi for both teacher workshops and sessions. On the whole this was achieved with, on average, two children to a device. Sharing did not seem to cause problems with children and in fact encouraged interaction between children.

Issues in relation to the technology required arose only in two cases:

- I.When schools had not organised access to devices in time, or these were not charged and made readily available for the scheduled session time.
- 2. When a school's internet was not sufficiently strong enough to allow multiple users to play the games at the same time.

The second issue was particularly the case in South Africa, where implementers sought to solve it by carrying a portable Wi-Fi router. This incurred additional unexpected costs. In the worst case, a combination of both issues jeopardised the learning of children in schools that were engaged but under-equipped.

Making the online materials available offline and even available on a pre-installed device would remove two of the main implementation issues and allow for reach into more rural or less well-resourced schools.









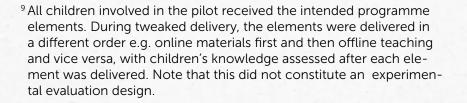


What works: best teaching practices

The evaluation was able to 'tweak' delivery in both countries in a handful of sessions. This allowed the programme elements to be separated across sessions which were then observed to help understand the different effects the online materials and offline teaching had on children's engagement and learning⁹. Tweaking delivery confirmed what teachers, session leaders and evaluators had previously observed: that the best learning happened when use of the online materials was combined with offline teaching, as intended. The evaluation also found that the best learning was achieved with the help of particular pedagogic strategies used by teachers and session leaders.

Teachers and session leaders involved in the pilot reported improvements in their practice at teaching DK Defenders as they moved through the pilot. They shared a range of strategies they had identified as being particularly effective at helping children understand and engage with the key messages, which have been categorised into three types of practice:

- I. Formative assessment
- 2. Building concepts
- 3 Embodied learning













I. Formative assessment

Formative assessment is a teaching strategy used to assess how well learners have understood the content being taught, and how teaching should be adjusted to help learners fill gaps in their understanding or move on (Black and William, 1998). Although teachers and session leaders themselves did not use the terms, they described several practices that can be classified as formative assessment.

First, session leaders assessed children's prior knowledge on safety and safeguarding. This took the form of direct questioning, use of the bespoke assessment tool and/or teachers acting out scenarios and assessing children's responses (see note on page 30 for reflections on different methods of formative assessment with deaf children). For external session leaders in particular, who did not previously know the children, it was important to assess children's individual language levels, especially sign language fluency and identify which signs already known by the children may be used to express key messages. For example, prior to teaching a group what Trusted Adults were, a session leader checked and reinforced children's understanding of what an adult was and checked what sign might be most appropriate to communicate 'trusted'.

Methods of formative assessment – including questioning, role play and observation of children's facial expressions and interactions with materials and others – were used throughout sessions to check understanding of the message(s) taught and identify any misunderstandings. As with initial assessment of language and prior knowledge, this often involved use of scenarios presented as direct questions ("what would you do?" or "what should they do?") or acted out by session leaders/teachers and assistants.

Teachers stressed that the most effective way to use scenarios was to ensure they were adapted to children's contexts and likely experiences. However, not all were aware they 'could' do this while following the Teacher Guidance when starting session delivery.

Example scenarios used by session leaders to assess children's understanding (South Africa, ages 10-13):

- If you were travelling in a taxi and the person sitting next to you tried to touch you under your clothes, what would you do?
- If an older boy in your neighbourhood showed you a video of someone without their clothes on, what would you do?

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• If an older kid in the hostel called you outside and asked you to take your shorts off, what would you do?

The paper-based activities provided in the Teacher Guidance were also used to assess children's understanding.











2. Building concepts

The most effective sessions used the results of the children's prior knowledge and language assessment as a starting point. Key underlying concepts (e.g. safe/unsafe, adult/child) were taught first where these were lacking. Then teachers and session leaders **built up concepts** gradually e.g. from adult, trust and unsafe to 'telling a Trusted Adult when you feel unsafe'. Breaking concepts up and building them up gradually in this way is sometimes termed 'scaffolding' in education.

It was noted in the previous section 'The impact on children' that some children found more nuanced messages more difficult to understand, or ones that involved unfamiliar situations. Asking children to imagine scenarios that they have never experienced requires a large cognitive leap. However, some session leaders were able to 'close the gap' to some extent between new or less familiar experiences and the DK Defenders content/key messages through the 'scaffolding', or staring with a familiar concept and context before or even instead of translating across to a new one e.g. using the idea of a stranger in real life to support teaching of Online Impostors.

Teachers noted it was important when building up concepts to make sure the signs selected for each message and concept were used consistently throughout the remaining sessions. Signs can vary school to school and even from child to child. **Consistent use of signs** reduced confusion and allowed children to build on what they already knew, accelerating learning.

Being able to carry out and use formative assessment to 'plug the gaps' in terms of children's knowledge or signs effectively was only possible when offline teaching preceded use of the online materials. It is likely for this reason that the most effective sessions provided teaching first and online materials second, before repeating for later messages.

3. Embodied learning

Teachers and session leaders repeatedly emphasised the importance of physical movement (beyond signs) to transmit and reinforce messages. Teachers themselves **role-played scenarios** to demonstrate a concept, or to assess children's understanding ("what would you do?"). The most effective role plays had been pre-planned, suited children's contexts, and **usually involved an assistant** in planning and acting, but could also be used spontaneously to address a misunderstanding identified through formative assessment.

Many teachers and session leaders taught children some **physical movement linked to key messages**, for example 'saying stop' then 'going/running to tell a Trusted Adult'). These movements were used alongside or instead of signs and repeated when these behaviours were repeated in later themes.



Figure 8 Photo of a child acting out the message 'Say Stop'



It was observed that children would sometimes 'act along' unprompted when watching the DK Defenders animations, sometimes using physical movements they had learnt in the lesson but also movements that had not been taught. This highlights the appropriateness of embodied learning methods, or teaching and learning that involves physical movement, for deaf children.

Practices across all three groups were considered 'best practice' that supported the learning of all children, but observation and interviews confirmed that they were particularly important for helping children with less developed language and sign language levels to engage with and understand the messages.

What can work: non-teaching session leaders

Most sessions delivered in South Africa during the pilot were delivered not by teachers themselves but by a team of external visitors organised by Thrive, the local implementation partner. Analysis of children's assessment results and other outcomes data found no significant differences in the impact on children between the two countries and delivery models. Though not statistically significant, assessment data in fact suggests that children in South Africa had a lower starting point and higher end point, and therefore a slightly greater increase in knowledge. Evaluation methods do not allow us to draw conclusions about why this might be, but this evidence suggests that delivering sessions through external visitors does not negatively affect children's outcomes.

Analysis of interviews with school staff and implementation partners identified some possible benefits to delivery through external visitors:

- Session leaders repeat delivery so can hone their practice over time, making them local delivery experts
- Improved practice may lead to better quality sessions, and more consistent quality (compared to a teacher who uses DK Defenders content only once a year, for example)
- Monitoring quality of delivery is easier for DKI
- Delivery may be more consistent, as schools are beholden to a scheduled visit (where otherwise it might be squeezed out the school timetable due to competing priorities)
- Session leaders can also develop connections to new schools that may have previously been unknown to DKI

- Children may be more engaged with the session and/or session leaders because of the novelty factor
- Children may have their self-esteem enhanced by discovering other adults they have not previously met care for them and their wellbeing
- Children who do not have a good relationship with adults in school have a chance to connect with and share concerns with another responsible and trained adult.

These findings suggest two things:

I. That sessions can be effectively delivered through session leaders who are not teachers

This includes external visitors but implies that session leaders could also be school staff who are not class teachers, such as teaching assistants or safeguarding leads. This may be more important in schools with different structures, non-school settings and so on. A lack of teaching experience may to some extent be supplemented by sharing the best practices listed above.

2. There may be reasons to use an external visitor model in future scaling

The above benefits may be considered, alongside the positive outcomes achieved, when selecting models for future scale-up in other locations. This delivery model has proved a feasible way, for example, at delivering high quality delivery at pace. It is not clear to what extent this may be replicated in other countries as results cannot be generalised from only one case which involved one implementation partner.

There must, however, be additional consideration of the potential effects on longer-term impact and sustainability of outcomes. This is discussed further in Section 7 'Beyond the classroom'.

It was noted on page 27 that both schools and teams of external session leaders most often combined a mixture of hearing and deaf adults. The effects of different combinations were not in scope for the evaluation, but schools and session leaders independently shared that they felt the most effective learning and engagement happened when a deaf educator had a key role in delivering the session. Observers and deliverers felt this increased children's understanding – as the deaf educator had greater sign fluency, and was more likely to use signs familiar to the children – but particularly underscored the natural rapport between a deaf adult and deaf children, which improved engagement, confidence and children's level of comfort. Deaf session leaders also found their involvement empowering:



"When I empower other deaf people, I empower myself too." Session Leader, South Africa

Delivery by deaf educators, where possible, seemed to highlight how the programme had been created so specifically for deaf children:

"You can just tell it is designed by and for deaf people...Nuances of deaf culture, barriers, difference of printed text, the visuals, it's all been taken into account." Principal, South Africa

To think about: Teacher Guidance

Data on session length and content suggests that teachers and session leaders broadly followed the Teacher Guidance. Both provided feedback on its utility. Teachers felt the Lesson Plans within the Guidance were useful for providing a clear order in which to deliver the themes/messages, and ideas for how to teach the messages offline.

Overall teachers felt the sessions laid out in the Lesson Plans were useful, appropriate and enjoyable for their classes.



Figure 9 Teacher responses to Lesson Plans (n=53) 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% The Lesson Plans The sessions were relevant to were enjoyable were effective at were easy for me contained enough (with lessons & for my students teaching the key games) lasted for my students ages to use content and needs safety concepts a suitable amount of time Strongly disagree% Disagree % Neither agree nor disagree % Agree % Strongly agree %

Some activities were used frequently, such as drawing Trusted Adults and colour-coding private body parts, though some teachers felt these were more useful for providing variety in activities between offline teaching and using online materials and as a way to check children's understanding than to increase learning for the older children in class.

Session leaders across both countries felt that certain activities or examples given in the Lesson Plans were not right for their children. For example, instructions

Figure 10 Trusted Adult drawing activity



given for activities were too complex or scenarios given within activities were not relatable. The Guidance encourages teachers to adapt content as necessary, as it was not intended to be (nor could be) universally suitable for all children, either in meeting cultural context, language and learning levels, or age differences. Evidence from the teacher survey and observations found that teachers/session leaders did in fact adapt lessons in some ways. Identification of the most effective teaching strategies listed above was only achieved by session leaders developing, testing and refining their own practices.

 It is clear that there is nevertheless a need for the message that teachers can and should adapt activities, materials and scenarios to their children's context and prior knowledge to be added in or re-emphasised within the Guidance. This will ensure teachers not only feel empowered but also encouraged to meets the needs of their class, particularly if DKI is to scale DK Defenders to other countries and cultures.

At the same time, it is important to balance teacher adaptation against other findings from this evaluation:

- The most effective combination of programme elements is to introduce the key message or relevant concepts through offline teaching before using the animations and games to reinforce learning, then return to assessing children's understanding of that message before moving on to another – at least the first time the messages are introduced.
- The impact seen here has been achieved through teaching all 7 messages. However, some teachers indicated they might not have chosen to teach all those messages to their children had they not been bound to expectations of pilot delivery. To what extent should teachers be encouraged to 'pick and choose' which messages they teach? What will the minimum expectation be of what content is delivered?

These decisions will need to be made in reprogramming before the next phase of implementation, and can then inform updates to the Teacher Guidance.

SUMMARY Joint analysis of impact and implementation has shown that a combination of offline teaching that employs certain 'best practice' teaching strategies and use of online materials is the most effective way to ensure key messages are learnt. The online materials are particularly important for children with less developed language and literacy levels, and additional needs – the most vulnerable. In order for the online materials to be consistently accessible, hardware & internet needed though overall implementation problems were minimal. Teacher Guidance requires updates based on evaluation findings of effective practice, but some key decisions need to be made about expectations of future programme delivery first. Effective teaching can be carried out by non-teachers to create short-term impact. The next section discusses the possible effects of different delivery models on longer-term outcomes.













7. BEYOND THE CLASSROOM

The scope of the evaluation was collecting data on outcomes within the pilot period, or short-term outcomes. It also looked for indications that impact might be sustained, and how this might be achieved. It was not possible to collect evidence on how long children might be able to recall and apply messages. However, sustaining the learning and ensuring it translates into greater protection for children requires changes in the knowledge and behaviour of adults around the children.

There are indications that teachers and parents experience changes that might deepen and lengthen impact for their children. Engagement of both teachers and parents in the pilot was limited in certain ways. Planning for more consistent engagement of teachers and parents in the next phase of programming and implementation may lead to longer-term outcomes and has implications for which delivery model(s) are used.

Evaluation questions

- What outcomes if any are reported by teachers and other stakeholders?
- What variations are there in delivery, and what effects do these have on engagement and outcomes?

Short-term vs longer-term outcomes

The scope of this evaluation was to identify outcomes experienced by children, teachers and parents within the pilot period, that is, during and shortly (<4 weeks) after delivery of DK Defenders in their school. It also aimed to capture any indications that the outcomes experienced might be sustained beyond the end of the pilot period or that other longer-term impacts might take place.

The first indication that children's outcomes might be sustained is children's ability to not only recall but apply the key messages voluntarily to new and existing experiences (see Section 5 'The impact on children'). Their ability to seek help from adults through disclosures reported after and during sessions suggest they may be more likely to seek help as long as they recall the DK Defenders messages. School staff iterated the need to repeat teaching of DK Defenders content regularly.

> 91% of teachers said they would use DK Defenders in their classroom again.

However, in order for short-term outcomes be translated into long-term change, children need to disclose to adults that can actively protect them. Evidence from analysis of 'the starting point' suggested that there may be gaps in teachers' and parents' capacity to teach children key safeguarding messages and act on any concerns their children might have (see pages 25-26). This evaluation has found indications that **DK Defenders can strengthen adults' attitudes and knowledge** even with light-touch engagement.









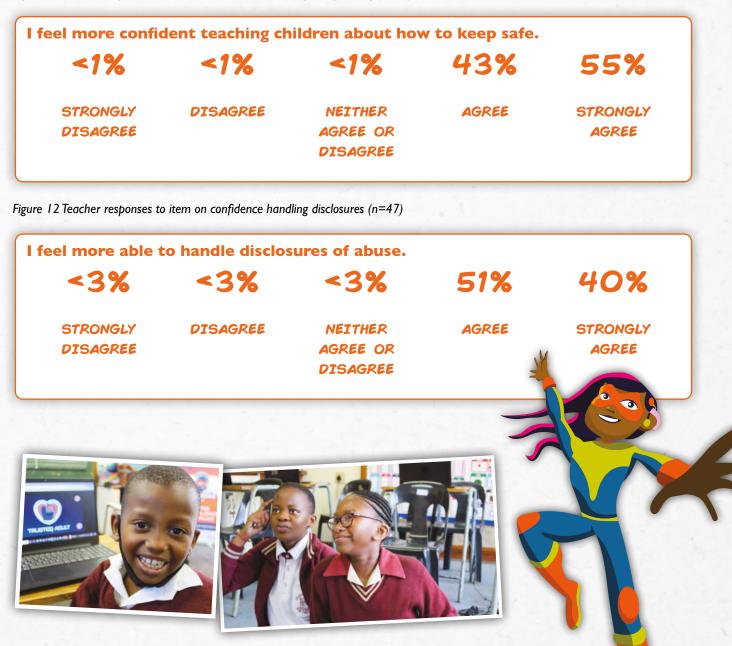
Teacher outcomes

All teachers involved in the pilot received some form of workshop, either in person or remote. As previously discussed, teachers in South Africa did not deliver DK Defenders directly to their students though some observed sessions led by implementation partners.

Despite varying forms of engagement, high percentage of all teachers surveyed across both countries reported changes in their own attitudes and abilities after DK Defenders had been delivered in their schools.

- > 98% reported feeling more confident teaching children how to keep safe
- > 98% reported feeling more able to handle disclosures of abuse

Figure 11 Teacher responses to item on confidence teaching safeguarding (n=47)















Qualitative data suggests this confidence comes from: receiving training (which was previously lacking for many teachers), having their cultural taboos challenged and gaining a vocabulary they did not previously have to discuss issues of abuse with children.

"As a teacher I used abstract ideas to explain this but with the clarity and teacher training it was helpful to quantify these concepts for teachers and children alike. My students now frame their points from a place of knowledge and confidence and it has helped break the taboos." Teacher, Pakistan

"Such training will also help educators to report more of such cases. Helps them be more open to discuss such topics specially since they have misconceptions and cultural taboos associated with them." School Leader, Pakistan

"If I train from DK Defenders I can definitely teach them, but first I need training." Teaching Assistant, South Africa

Parent outcomes

Parents and carers received only light-tough engagement which informed them the programme would be taking place and gave some basic information about its aims. Further ideas were discussed with implementation partners and schools at the programming stage, but school staff and implementers described the significant barriers that faced schools in engaging parents:

- Limited communication
 - Between parent and child
 - Between parent and school
- Residential schools
 - · Parents may live far away and have limited resources to
- Topic (abuse)
 - Sometimes seen as the school's responsibility to teach, and therefore not something parents need to take up or be involved in
 - Cultural taboos mean safeguarding messages become a 'no-go' topic

These barriers have prevented schools from developing the basic relationship and communication pathways that would enable implementation of a DK Defenders element targeted specifically at parents. However, some powerful examples were shared where schools in Pakistan had managed to engage parents in a more in-depth group discussion after completing the survey. These parents had positive reactions to the programme, the impact it had had on their children and found it challenged some of their cultural norms:

> "I have 3 daughters and we are always concerned about their personal safety, it weighted heavy on my mind when I had to travel with them or attend a large gathering. When we learnt about the DK Defenders programme I was amazed at the dignified manner in which the subject was presented to adolescent children. Discussing sexual abuse, calling out an abusive adult and talking about personal safety is a big taboo in our culture and specially discussing it with children. The DK Defenders programme was an eye opener and spoke directly about why we need to educate and inform our children." Parent, Pakistan

> "Initially I was cautious about the introduction of an abuse prevention programme. We don't usually talk about such things at home and keep our girls protected by constantly providing them with a safe space and restricted movement and interaction with the opposite gender. When my daughter told me about this programme I was surprised at how clearly she understood safeguarding. Such training helps empower our children to speak and take a stand, not just for themselves but others around them." Mother, Pakistan

"With this personalized game for deaf children, I see a change in my son's confidence when we talked about the content and he felt safe and informed. I think this programme definitely makes it easier for children to talk about such topics with their adults, we may have good communication but were lacking the right vocabulary to address these topics." Father, Pakistan









Teachers also noted that children alone – who may already have difficulties communicating with their parents - might struggle to re-teach the messages to their parents:

"The DK Defenders is very informative and helpful. However I suggest that parents must be given this training before children as they can also teach their children at home and help them understand better. Moreover, it will not be easy for children to make their parents understand." Teacher, Pakistan

Ways to engage parents who are willing should be trialled in the next phases of implementation to identify some strategies that may work despite the feasibility barriers noted above, even if it only reaches the most accessible to begin with. It seems this will also support repetition of key messages for children, and equip parents to listen to their concerns.

Implementers in both countries emphasised that any content for parents should be delivered as far as possible through existing school-parent communication mechanisms to have the best chances of success. Suggestions included:

- Sending low-resolution videos by WhatsApp in a local language.
- Presenting or distributing material to parent groups e.g. signing lessons
- Working with hostel staff in residential schools, as a carer 'in loco parentis'.

Impact indicators (adults)

The pilot achieved its Key Performance Indicator in relation to impact on children's outcomes.

Indicator

Increased engagement of teachers, parents, [peers and professionals] about sexual abuse and exploitation of deaf children.

Achievement

91% of teachers said they would use DK Defenders in their classroom again.

98% of teachers felt more confident teaching children how to keep safe

98% of teachers felt more able to handle disclosures of abuse

26% of parents reported their children sharing a concern with them for the first time after completing DK Defenders.

















Implications for delivery

The changes described by teachers and parents provide indications of early impact on adults as a result of DK Defenders delivery in their children's schools. Combined with the impact on children's outcomes, this supports the choice of a school-based intervention model. It also suggests there is potential to create greater change here by making engagement of teachers more consistent and deepening engagement with parents where feasible.

The levels of teacher engagement in delivery varied between countries due to the pressures exerted by the pilot timeframe and indicators. Although both models (teacher-led sessions and partner-led sessions) led to positive outcomes for children, ensuring that change among teachers is deep and sustained enough (increased safeguarding capacity, repeated teaching of DK Defenders messages) will require commitment to the teacher-led delivery model as piloted in Pakistan. It is also likely that the teacher-led model will be quicker to roll out at scale as reach is not limited to the capacity of one or two implementers on the ground, and a whole teaching staff can be trained and 'deployed' more quickly.

Learning from delivery in South Africa has nevertheless identified some possible benefits that may be drawn from the external visitor model to enhance the original model:

- There is already a 'pool' of best practice and experiences that experienced session leaders can share to improve practice of new teachers/session leaders
- > Experienced teachers/session leaders could model session delivery e.g. the first session out of three
- A 'visitor' model could be replicated by tasking a non-teaching member of staff (such as a safeguarding lead or department head) to 'travel' around classrooms and deliver sessions, with a teacher supporting (or one member of staff visits other schools in a federation)
- Identification of best practice and effective session structure can now be used to monitor quality of delivery
- 'Local experts' could be used to both train and monitor quality of delivery

There are many possibilities for tailoring the next round of teacher-led delivery to enhance impact based on the findings of this evaluation. Decision-making about which options are developed should take place after the programme theory of change is reviewed with a new focus on explicitly linking short-term outcomes to long-term impact. The updated theory of change can then guide programming accordingly.



8. RECOMMENDATIONS

Recommendation I: Review programme theory of change, and use this to guide programming decisions for next round of implementation

The theory of change should be reviewed with stakeholders in light of the evaluation findings, and with a clear focus on connecting short-term outcomes that have now been confirmed with the longer-term impact the programme aims to achieve. These decisions should include:

- What is considered the 'core' content of DK Defenders and what content is priority for development (see Recommendation 3)
- How teachers will be engaged, and how delivery will be shifted to teacherled sessions in South Africa and new locations (see Recommendation 6)
- How parents will be engaged (see Recommendation 5)
- How existing pilot schools are expected to engage with the programme after the pilot end.

Recommendation 2: increase reach by making materials available offline

• Create an offline version of the online materials to ensure smooth delivery in classrooms regardless of school conditions, and to increase engagement amongst children and parents at home.

This will allow schools in more dispersed locations, or other conditions with insufficient internet, to be involved. It will ensure children's learning in all schools can happen uninterrupted and session time is maximised. Smooth session delivery will increase the probability teachers continue using DK Defenders regularly with their classes.











Recommendation 3: increase reach by creating additional content for teenagers

- Develop content to meet demands of a wider age range than originally targeted. Increase potential reach by developing content related to issues particularly affecting teenagers, such as sex and relationships.
- Regularly develop, update and add content based on feedback from schools in targeted geographies and research to ensure DK Defenders stays relevant and reaches the widest suitable audience it can.
- Organise new and old content as 'modules' and clearly communicate expectations about which modules should be taught to who/when and in what order. Define what content is core or the minimum expected, and what is optional or additional for different groups.

Recommendation 4: increase short-term impact by sharing best practice

The evaluation has identified the type of teaching that is most effective at helping children learn DK Defenders' key messages, alongside the online materials. Schools and teachers can vary greatly in their practices, experiences and 'usual' pedagogy, and many may not be familiar with the practices identified in this report.

To mitigate differences in the experience and skillset of teachers and session leaders, best practice should be shared with in (at least) three ways:

- Update the Teacher Guidance, to include:
- How to teach DK Defenders the first time (how many sessions, which messages) and possible ways to embed DK Defenders through regular teaching
- How to combine offline and online materials
- · How Lesson Plans can be adapted, and what must be adhered to
- Best practices for teaching (as listed in Section 6 'What works')
- Updating the introductory workshop for teachers to include and model the key practices, and assess teachers' current experience with using them
- Create an online platform, Community of Practice or similar medium for those involved in the pilot to share their experiences and practices, building











capacity among both experienced and new session leaders.

Best practice can also be promoted by including formative classroom observations as part of a future monitoring framework.

Recommendation 5: increase long-term impact by trialling ways to engage parents

Section 7 'Beyond the classroom' outlined the reasons for deepening engagement of teachers and parents, to sustain short-term outcomes and generate long-term impact. Evaluation findings suggest that solutions may be to some degree locally-specific. It is therefore recommended that DeafKidz International develops and tests strategies in one or two sites at a time to reduce complexity. It will need to draw on schools' own expertise at engaging parents.

- Select sites for testing
- Identify existing communication patterns between school and parents, and other helpful knowledge about the community of parents
- Select strategy to be tested (some suggestions are listed on page 56)
- Develop and translate any materials e.g. letter, assembly script, text messages with links.
- Establish how success of the strategy will be monitored: how will DKI know if it has been successful? What data is required?

Recommendation 6: increase long-term impact and sustainability by engaging teachers more consistently

Section 7 'Beyond the classroom' explained why adults other than teachers delivered the DK Defenders in South Africa during the pilot period, and identified some of the learning about 'what works' based on this alternative model. It also outlined the incipient changes teachers experienced and the need therefore to engage teachers more consistently in actively delivering classes in order to maximise these outcomes and increase impact for children. Key expertise developed by external session leaders during the pilot, and some of the benefits listed on pages 51-52, should nevertheless be harnessed and utilised during this process.











- Transition to a teacher-led model in South Africa and/or trial a 'mixed model'; approach new scaling geographies with the assumption that teachers will be required to deliver within one of these models
 - A mixed model may involve one or all of:
 - A 'see one, do one' approach, where external visitors model the first session and teachers then take over delivery
 - Co-delivery, where visitors and teachers plan and teach one or several sessions together
 - Formative observations of teacher-led sessions by external visitors, who provide constructive feedback afterwards.
 - A mixed model may bring in some of the benefits of the external visitor model described above, and be more appropriate in some countries depending on DKI's existing relationships in country.
 - To think about: delivery in South Africa showed that extra time must be factored in for engaging new schools where there are no/few preexisting relationships. This would affect timelines for both models.
- Strengthen and adapt teacher training as necessary to ensure teachers are equipped as well as possible (as per Recommendation 4)
- Implement a monitoring framework to check longer-term use of resources and school-level outcomes
- Capture and share expertise of experienced session leaders (as per Recommendation 4)

DeafKidz International and local partners have already begun strategic planning to secure endorsement of the DK Defenders programme by local Ministries of Education, and/or secure its place on the mandated curriculum. Engaging teachers in delivery may increase buy-in from such higher-level stakeholders by:

- providing multiple benefits, such as capacity-building for their teacher workforce, as well as improved child protection
- making a clear case for Ministries or local authorities to take ownership of the programme's use, as a tool that is used by their schools rather than 'delivered to'.











REFERENCES

Black, P. and William, D. (1998) 'Inside the Black Box: Raising standards through classroom assessment', London: School of Education, King's College, London.

Dake JA, Price JH, Murnan J. Evaluation of a child abuse prevention curriculum for third-grade students: assessment of knowledge and efficacy expectations. J Sch Health. 2003;73:76– 82. doi: 10.1111/j.1746-1561.2003.tb03576.x

McElearney, A., Adamson, G., Murphy, C., Rogers, S., Radcliffe, D. (2021) Keeping Safe: an effective whole-school programme that teaches children to recognise abusive behaviours and tell: cluster randomised trial evaluation results in primary schools in Northern Ireland. London: NSPCC. doi: 10.1186/s12889-018-5492-8

Rowley, K. (2020) Sign Language Acquisition. In S. Hupp & J. Jewell (Eds.), The Encyclopedia of Child and Adolescent Development. Wiley Blackwell.

Stanley, N. et al (2021) Evaluation of the NSPCC Speak out Stay safe programme: final report. London: NSPCC.

Thomas, E. (2022) Evaluation of DeafKidz Defenders Pilot: Key Findings Summary Report. DeafKidz International. Available at: https://deafkidzinternational.org/

Tutty, Leslie. (2019). Children's Knowledge of Abuse Questionnaires (CKAQ)-Short: Two Brief Ten-Item Measures of Knowledge about Child Sexual Abuse Concepts. Journal of Child Sexual Abuse. 29. doi: 10.1080/10538712.2019.1688443.

Wurtele, S.K., Saslawsky, D.A., Miller, C.L., Marrs, S.R. & Britcher, J.C. (1986) Teaching personal safety skills for potential prevention of sexual abuse: a comparison of treatments. Journal of Consulting & Clinical Psychology, 54(5): 688–692



APPENDIX A: PROGRAMME INDICATORS

The indicators below were generated in collaboration with joint funders: the Global Partnership and Fund to EndViolence Against Children and Oak Foundation

Implementation indicators

Indicator	Achievement	
# At least 600 deaf children pilot the digital gaming toolkit, of which 300 in South Africa.	620 children in total, of which 302 in South Africa.	
# Page impressions on DK Defenders game website (5,000)	2901 unique sessions were recorded in pilot countries during the period May-Sept.	
#At least 50% of users staying on website for 5 minutes or more playing the games	Mean session time was 1171 seconds (19.5 minutes).	

Impact indicators (children)

Indicator	Achievement
80% of children self-reporting that they are better able to identify appropriate vs inappropriate behaviour and know when and how they can say no as a result of the game	91% of children increased their ability to correctly recognise abuse and select an appropriate protective behaviour (saying no and telling a Trusted Adult) after completing DK Defenders, as measured through pre-post testing.

Impact indicators (adults)

Indicator	Achievement	
Increased engagement of teachers, parents, [peers and professionals] about sexual abuse and exploitation of deaf children.	 91% of teachers said they would use DK Defenders in their classroom again. 98% of teachers felt more confident teaching children how to keep safe 98% of teachers felt more able to handle disclosures of abuse 26% of parents reported their children sharing a concern with them for the first time after completing DK Defenders. 	

¹⁰ The original indicator proposed (page impressions) was based on DK Defenders materials being delivered through an open-access website. The delivery model was later changed to school-based delivery to ensure the safety and wellbeing of children using the online materials. As they were accessing the website in a controlled environment, monitoring no longer counted page impressions – which represent simply the times a page was viewed and might count a child's activity many times over – but unique sessions, which represent



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