



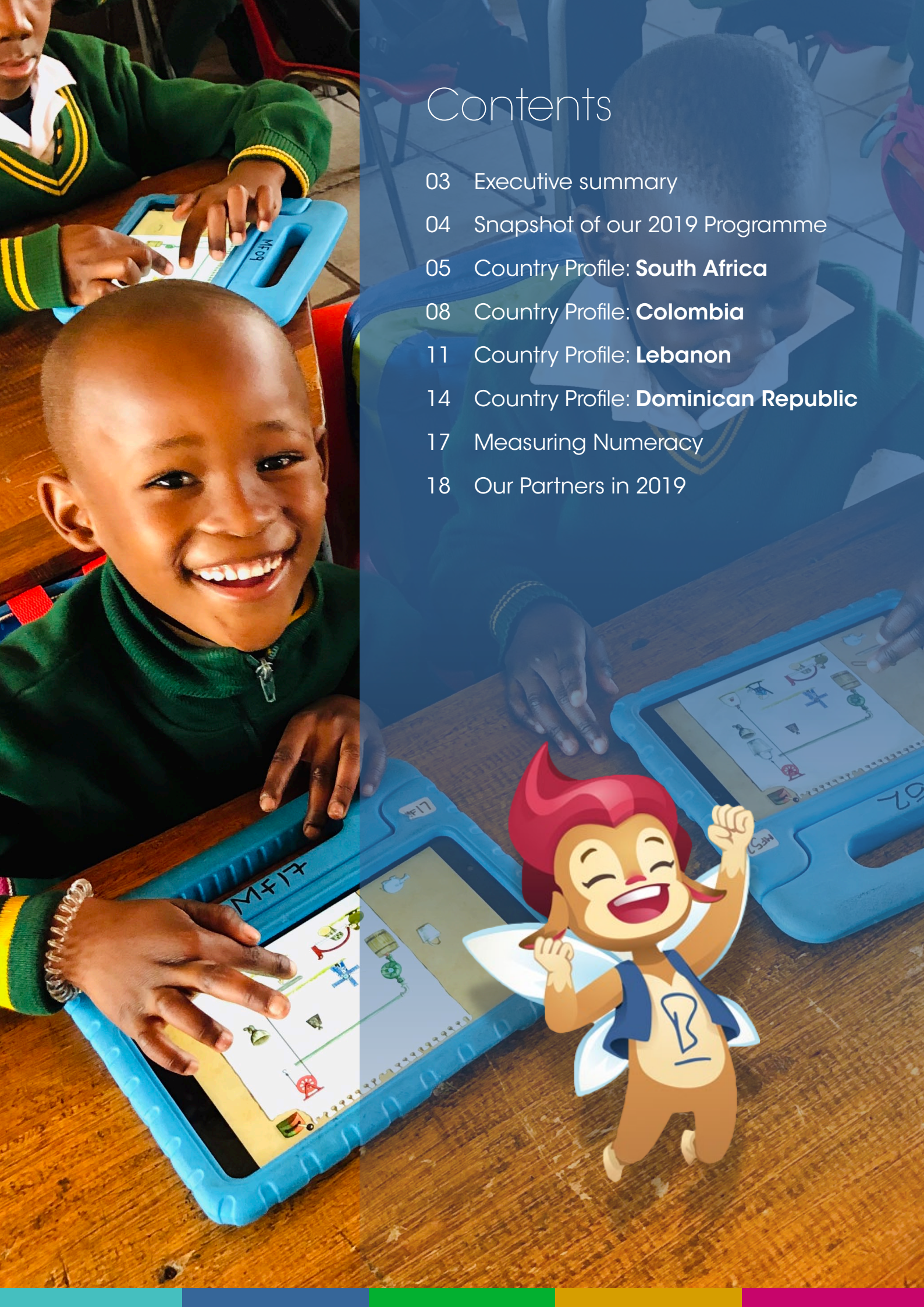
THE
BRETEAU
FOUNDATION

2019 Annual Report



Contents

- 03 Executive summary
- 04 Snapshot of our 2019 Programme
- 05 Country Profile: **South Africa**
- 08 Country Profile: **Colombia**
- 11 Country Profile: **Lebanon**
- 14 Country Profile: **Dominican Republic**
- 17 Measuring Numeracy
- 18 Our Partners in 2019



Executive Summary

As we draw 2019 to a close, we look back at the last 12 months, and as we review we cannot help but consider the endless opportunities to aid accessible, inclusive and quality education for all children.

This concept of 'endless opportunity' was particularly poignant on our recent tour to Lebanon, where our Mobile Education Bus provides teaching and learning to 2,304 Syrian refugees living in basic settlements. Despite the fact that many of the children have never attended schools, and far too many work for meagre wages to support their families, it was extraordinary to experience these children, their energy and enthusiasm for learning.

When we contemplate our support from a developing world perspective, the global statistics on access to education continues to be too staggering to comprehend. According to reports by the United Nations on Sustainable Development *Goal Number 4: Quality Education*: 265 million children, including 22% primary school aged, and 50% living in conflict-affected areas, are currently out of school. In addition, 617 million children lack basic literacy and numeracy skills, often due to inadequately trained teachers and deficiencies of resources.

In light of such statistics, we are very proud of the 26,572 children we have reached this past year, an increase of 58% from 2018. Our focus on operational efficiencies allows us to dedicate more of our staff time to providing strategic advice to schools, training more teachers and delivering further in-class support.

This year we celebrated five years in South Africa where in 2014 we began our operations with 84 learners and five teachers. In 2019, we reached 11,373 learners and 334 teachers. In Colombia, our staff provided 647 hours of teacher support to staff in our partner schools. This aid has been directly aligned to a key recommendation by the OECD to the Colombian Government, when



they suggested, our way to improve standards in schools is through quality teacher training. In the Dominican Republic we are heartened to see the dramatic uptake of technology usage by our partner schools. Usage of tablets and apps was overall 93.66%, which was significantly higher than the 80% targets that were set for our project schools.

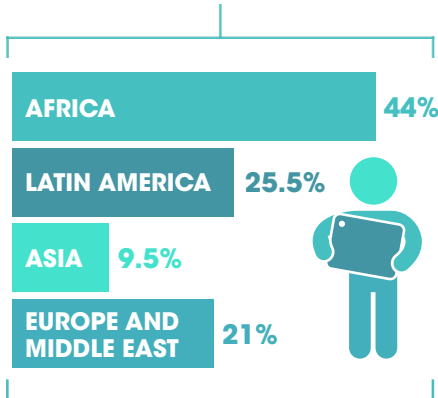
It is our great privilege to work with school leaders and teachers who give their time to work with us to help develop technology rich teaching and learning environments. We are also fortunate to work with so many partner's innovations, products and services: thank you, your support directly benefits some of the world's most disadvantaged children.

This report provides an overview of our work this past year with a focus on four countries. We conclude with optimism; that children we have reached this year have gained from our programme, and are inspired to learn through technology. It is their fundamental right, and all our futures, are in these children's hands.

2019

SNAPSHOT

- Countries **10**
- Teachers **838**
- Students **26,572**



- Tablets **2,994**
- Apps **233**

"Technology in education is important because it provides the students with an audiovisual world of knowledge."

Carmen Royero
Colombia

100%
TEACHERS

in Lebanon increased their IT competencies due to our training

180
hours spent on literacy app in Lebanon

232
hours spent on maths app in Lebanon

2,304
SYRIAN REFUGEES
enrolled on Mobile Education Bus

100%
ATTENDANCE
reached when lessons include tablets

90%
STUDENTS
agree technology makes subjects more interesting

4,693
BOOKS
read online by 725 children in Colombia

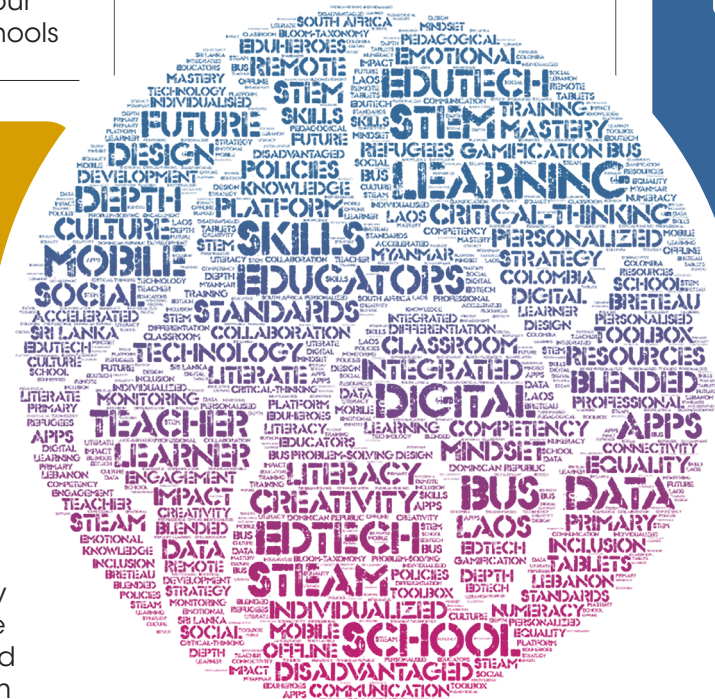
2,204
HOURS
of support received by teachers in our programme schools

94%
tablet usage in Dom. Republic

MORE THAN
40
significant global partnerships

5
YEARS
IN SOUTH AFRICA

84%
teachers in South Africa say tablets reinforce subjects learned in the classroom



South Africa





11,373
Students



334
Teachers



880
Teacher support hours



1,384
Tablets



65
Apps

In 2019 we celebrated five years in South Africa where this year, we expanded our reach to 28 schools 334 teachers and almost 12,000 learners across Gauteng, Western Cape and KwaZulu Natal provinces. In total, all the students in our programme used the tablets for 7,637 hours from February to October.

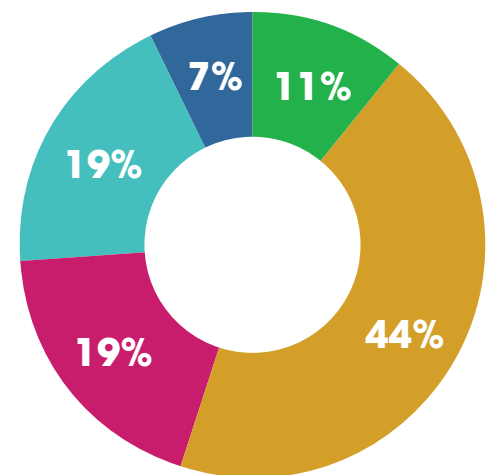
	Students	Teachers	Tablets
2014	84	5	52
2019	11,373	334	1,384



Our support is directed to the 77.3% of children who attend public schools and are on free-meal schemes. We have responded to the Government's curriculum needs by providing direct support to improve: main languages, literacy and numeracy, and in 2019 following the Government's announcement to focus on teacher training improvements, we activated a direct response by training teachers in lesson planning, resource provision and development, as well as providing in-class coaching.

Working with **school leadership** is critical to our success. We have a rigorous two-year programme that is aimed at driving schools towards digital autonomy by providing tablets, apps, resources, teacher-training, and in-class support and driven by exceptional leadership. In review of the first year of our current group of schools within our 2-year Breteau Foundation Programme, we are pleased that over half of the schools are operating already at level 4 and 5. In 2020, we will provide additional support to ensure that the 26% of schools in Levels 1 and 2 are further supported to increase their strategic levels. The pie chart below provides an analysis of school leadership in our programme:

- **Level 5** Strategic, programme working very well.
- **Level 4** Programme working well in parts.
- **Level 3** Partly strategic, programme working well in parts.
- **Level 2** Not strategic, few areas of programme working well.
- **Level 1** Not strategic, programme not working well.



Teacher Training remains an integral part of our programme and includes both in class support as well as workshops covering Introduction to Digital Teaching & Learning, Deployment and Lesson Planning for the Digital Classroom, Digital Toolbox and Literacy and Supporting Maths and Critical Thinking with IT. Our teacher training methodology is to build IT confidence and competence in every teacher we train. We expect each teacher to progress in their own professional development and be capable to cascade their learning to teacher peers.





44 WORKSHOPS

264 HOURS
of in-class support

154 HOURS
of training

Learner Engagement, Motivation and Progress

This year we have studied learners (58% boys and 42% girls) in Grade 3 (9-11 years) across 8 schools including undertaking observations and surveys to capture learner voice. Within the sample 72% told us they have minimal or no access to technology with only 28% stating they 'sometimes' have access or 'no access' to technology. Only 28% stated they have good access to technology. In our one-to-one interviews with children: 90% told us that technology made the subject more interesting and 96% told us that technology helped improve their learning 'a lot' and 'sometimes'. In addition, our observational assessments of the children showed that 98% were confident handlers of the tablets. Learner voice is presented below:

Technology made the subject 'a lot' and 'sometimes' more interesting.

90%

Learning with tablets helps improve subjects learning 'a lot' and 'sometimes'

96%

Using tablets in schools is important

94%

Apps 'always' and 'sometimes' helps my learning of maths

96%

Apps 'always' and 'sometimes' helps my learning of English

88%

In view of these statistics, we are confident that the technology we provide has had a positive role in engaging students and raising standards based on the correlation between a student's motivation about a subject and how this supports a child's learning and in turn subject knowledge/development.

What the teachers say

84%

"The tablets and apps reinforce what is learned in the classroom."

78%

"Students' IT confidence was increased due to the Breteau Foundation's programme."

74%

"Students learn new subject knowledge through the tablets and apps we provide."

52%

"Learners increased academically due to technology."



"The tablets particularly helped 'struggling students' as these children engaged and experienced success (at their level), and this compelled them forward: progressing their own learning."

Mrs Williams HOD
Dr Van Der Ross Primary School, Capetown





Colombia





6,049
Students



191
Teachers



647
Teacher support hours



995
Tablets



62
Apps

In 2009, 29,000 Colombian children were out of school compared to 84,000 in 2018. Following a review by the OECD in 2016, their recommendations to the Colombian Government were for a common-curricula, improved quality teaching, a reduction in school drop-out rates and a decrease in children repeating school years. Primary schools were seen as a critical link to: raise education standards; to give all children a strong start in education; close the large disparity between urban and rural schools, improve learning outcomes for all; and enhance educational resources.

Our programme has been running in primary schools in Colombia for four years and in 2019 we reached over 6,000 students. Schools in our programme are guided through a step-by-step process involving strategic meetings, teacher-training workshops and classroom support. We rigorously assess our programme along the way and provide bespoke support to meet school and teacher needs.

Teacher Professional Development

We provide a two year professional development programme and we monitor teacher development using the European Framework for the Digital Competence of Educators. Some of the teacher competency increases we noted include:

JAN 2019
45%



DEC 2019
96%

"I use technology to advance learners at different speeds and levels."

JAN 2019
46%



DEC 2019
98%

"I use technology to foster inter-disciplinary learner skills, critical thinking and creative expression."



Cluster Training

Our schools are placed into one of six cluster groups to promote local-self-supporting and long-term sustainable structures. The clusters allow us to economise our time in formal training and provide more time in the classroom giving teachers more 1:1 support. The clusters have given schools local to each other, the opportunity to work together: a space to share their achievements & challenges, to co-design solutions and inspire each other forward. Each participating school within a cluster hosts meetings and therefore can showcase their IT technology systems and practices. In terms of our internal assessments, 100% of our project schools are adopting a more strategic, 1/3 of schools are operating at the highest level (Level 5) where the Cluster is both Strategic and the Programme is working well.



Learner Engagement, Motivation and Progress

We are able to observe students through our in-class support however we also undertake end of year surveys to register their experiences and thoughts using technology. Students told us the following:

90%

technology made subjects more enjoyable.

88%

apps help them to learn Maths.

82%

were able to use the tablets and apps on their own.

74%

apps help them to learn English.

74%

apps helped improve their subjects.

Learner Progress - Literacy

The value and importance of being able to read, and read well is unquantifiable. It aids concentration skills and children's ability to focus on a task, it relaxes while engaging the brain, it develops children's thinking skills and provides endless knowledge and learning across all subjects. Reading supports our communications both verbal and written. The OECD PISA report (2015) showed that students in Colombia scored 425 points on average in reading, which was well below the PISA reading average amongst participating countries.

725 learners read 4,693 books. An average of 6.5 books per child.

There are no quick fixes to developing skills for reading across a population. It takes the efforts of parents, teachers, policy-makers and children themselves. It requires building a passion for reading in young people so that each child will compel themselves forward in this life skill and no child will leave school unable to read. This year we used a reading app to encourage more children to read, to promote an interest in reading and support reading comprehension, and our results suggest it's working.

Groups	Readers	Books read per group	Average reading time
Grade 1	114	529	08.04 min
Grade 2	101	637	15.33 min
Grade 3	153	1594	22.04 min
Grade 4	126	821	15.19 min
Grade 5	133	806	16.19 min
Grade 6	98	306	09.09 min
Total	725	4,693	14.31 min per book

"Most of the time I read here in the school, in my house there are not many books."

**Samuel - Grade 3
CoLegio Seleccion**



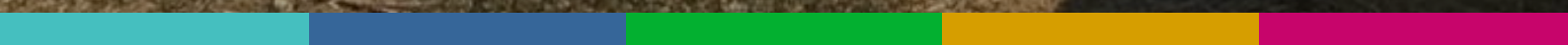
"I think I read about 11 books this year. The previous year I didn't read any."

**Juan - Grade 4
CoLegio Seleccion**





Lebanon





5,264
Students



204
Teachers



473
Teacher support hours



363
Tablets



46
Apps

More than 40% of Syrian children affected by the war and conflict are missing their education – they are termed ‘the lost generation’.

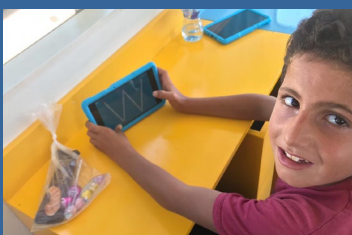
In March 2020 it will be 10 years of the Syrian civil war. The Syrian Observatory of Human Rights suggest that near 12 million people require humanitarian assistance of which 6.2 million are displaced in Syria, and another 6.7 million are refugees. This year we reached 5,264 refugee children, which is an increase of 32% from 2018. 2,304 of these children were students on our Mobile Education Bus. In addition to supporting children, we provided professional development to 204 teachers, an increase of 42% from 2018.

In Lebanon our programme follows our *theory of change model* but operates in a unique way from our work in other countries. We collaborate closely with other charities, in particular informal education centres and we operate our own Mobile Education Bus classroom that enables us to reach the most vulnerable children, otherwise known as the ‘lost generation’, living in settlements around West Bekaa.

Mobile Education Bus



Our digital mobile classroom is aimed at accelerating children’s academic progress in literacy and numeracy in order to aid their ability to access formal education. The children we reach are typically affected by displacement, conflict, violence and extreme poverty. Our Mobile Education Bus and classroom enables us to reach children who would otherwise have limited or no access to education at all. In 2019, we provided 1,688 technology sessions and a further 1,688 psycho-social support sessions on our bus.



Our mobile bus travels within West Bekaa: the area with the highest number of Syrian refugees in Lebanon, and highest strain on Lebanon’s education services. Our bus is a vibrant environment for teachers and learners alike, designed to be an adaptable learning space fitted with tablet technology and loaded with relevant education content: it’s an oasis from the tent cities from where our learners derive.



Psycho Social Support

The students attending our bus school are displaced, we often identify high numbers of children with social and emotional needs. The key trends we find include children displaying depression and mental health problems (such as anxiety and PTSD), lack of confidence and self-esteem, as well as poor social and communication skills. Our programme includes therapy support through creativity and play in a custom made tent on the side of our Mobile Education Bus.



Teacher Training

This year our team in Lebanon provided a total of 473 hours of support including 191 training hours to teachers at our partner schools/centres as well as 282 hours of in-class support.

469 teachers and 43 other staff attended our training sessions equating to 1,280 hours of teacher time spent in a Breteau Foundation training session. Training included: Digital Education Planning & Deployment, Toolbox, Literacy, Maths and Critical Thinking. We undertook assessments of all teachers at the start and end of the year. 100% of teachers increased their competencies by at least 1 Level.

	Start of Year	End of Year
Hardware & Software	39% at Level 1 61% at Level 2	12% at Level 5 88% at Level 6
Teaching & Learning	70% at Level 2 30% at Level 3	10% at Level 4 35% at Level 5 55% at Level 6
Self-regulated Learning	35% at Level 2 65% at Level 3	24% at Level 5 76% at Level 6
Accessibility & Inclusion	25% at Level 1 75% Level 2	75% at Level 4 4% at Level 5 21% at Level 6
Differentiation & Personalisation	10% at Level 1 35% at Level 2 55% at Level 3	22% at Level 5 78% at Level 6
Actively Engaging Learners	30% at Level 1 45% at Level 2 25% at Level 3	28% at Level 5 72% at Level 6

"The children have access to our digital education tablets which is good for their engagement, and also gives them the chance to learn at their own speed."

Caroline Breteau

Learner Engagement, Motivation and Progress

We undertook a literacy and numeracy study of students at three education centres. We assessed children on their academic progress based on 4 Levels (Level 4 being the higher achievement level). Following our support, all 72 students increased to either Level 3 or Level 4 which shows an average academic increase of at least 1, 2 or 3 levels by the students.

Education Centre	Numeracy		Literacy	
	Pre-Assessment	Post-Intervention Assessment	Pre-Assessment	Post-Intervention Assessment
GBA Settlement	100% at Level 1	44% at Level 3 56% at Level 4	100% at Level 1	50% at Level 3 50% at Level 4
SAWA 2	32% at Level 1 68% at Level 2	12% at Level 3 88% at Level 4	80% at Level 1 20% at Level 2	20% at Level 3 80% at Level 4
Damma	70% at Level 1 30% at Level 2	12% at Level 3 88% at Level 4	88% at Level 1 12% at Level 2	88% at Level 3 12% at Level 4

What the teachers say

64%

of students learn new subject knowledge when using the apps.

70%

of students' IT confidence has developed in using technology.



Dominican Republic





716
Students



22
Teachers



204
Teacher support hours



145
Tablets



68
Apps

Our programme in the Dominican Republic supports over 700 children. In 2019 we started the year with a focus on supporting schools strategically along with the continuation of our teacher-training programme through our cluster group model. We noted that 75% of our schools are working at the highest strategic level in terms of tablet management and application to the curriculum. Well-planned tablet schedules and rotation across schools is a key step to autonomy, and in 2019 schools reported tablet usage by an average of 93.6% well above the target of 80%.

There is a significant amount we, at the Breteau Foundation can do to support the Government's focus on curriculum reform, teacher professionalism and illiteracy when you consider a third of the population live in poverty and 20% in extreme poverty. In order to address some of the issues identified amongst school children, we have focussed our support on early years because we recognise that a child's most important developmental steps occur before they set foot in a primary school. We aim to raise a child's life chances by stimulating an interest in and providing early education and building critical bridges with families. The children in our day care programme are awarded certificates for completing their early years curriculum which we believe is a trigger to their educational engagement.

Teacher Training

Building teacher's confidence in the use of technology for teaching and learning was our main focus this past year. We have delivered training in technology management and pedagogical skills; lesson planning; and self-evaluation. This has included:

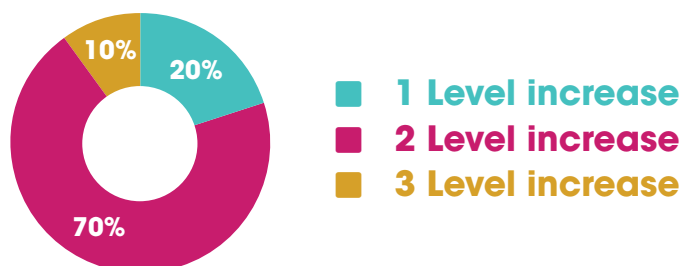


96 HOURS
of school IT strategic and operational support.

24 HOURS
of formal training
(100% attendance by teachers).

84 HOURS
of in-class support.

We measure our training delivery by undertaking start and end of year assessments of teachers based on the *European Framework for the Digital Competence of Educators*. There are six levels in total, each level demonstrates an increase in one of the following competencies: knowledge of hard/software; ability to support and engage independent learning; evaluation and assessment strategies; accessibility and inclusion and differentiation and personalization. Our results showed that:

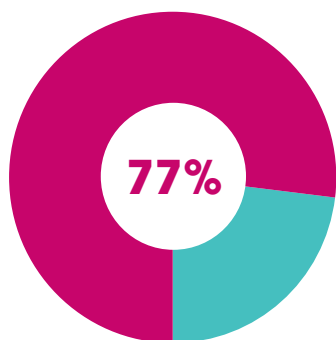


Learner Engagement, Motivation and Progress

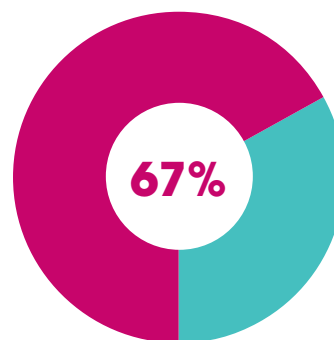
We undertook a study of shapes and colour amongst 35 children. Children were assessed, then undertook a five-week self-learning intervention using tablets and apps, and were then reassessed. The study observes the child in various ways including: a) using an app to recognise, categorise and organise shapes/colour and solve shape/colour problems; b) able to state the name and attributes of shapes/colours; and c) follow instructions and use technology confidently. Children were judged at three possible levels (Level 1: lowest / Level 3 highest). The results of our study showed that the children's ages correlated with a steady level increase: 60% of children increased by at least 1 Level at Pre Kindergarten, to 94% at Kindergarten to 100% increase amongst children at Pre Primary.

	Pre-intervention assessment	Post-intervention assessment
Pre-Kindergarten	7% children at Level 1 93% children at Level 2	47% children at Level 2 53% children at Level 3
Kindergarten	13% children at Level 1 87% children at Level 2	13% children at Level 2 87% children at Level 3
Pre-Primary	40% children at Level 1 60% children at Level 2	100% children at Level 3

We interviewed teachers and found that the majority agreed that tablets and apps are an excellent tool to reinforce what students are taught by teachers. Teachers also said:

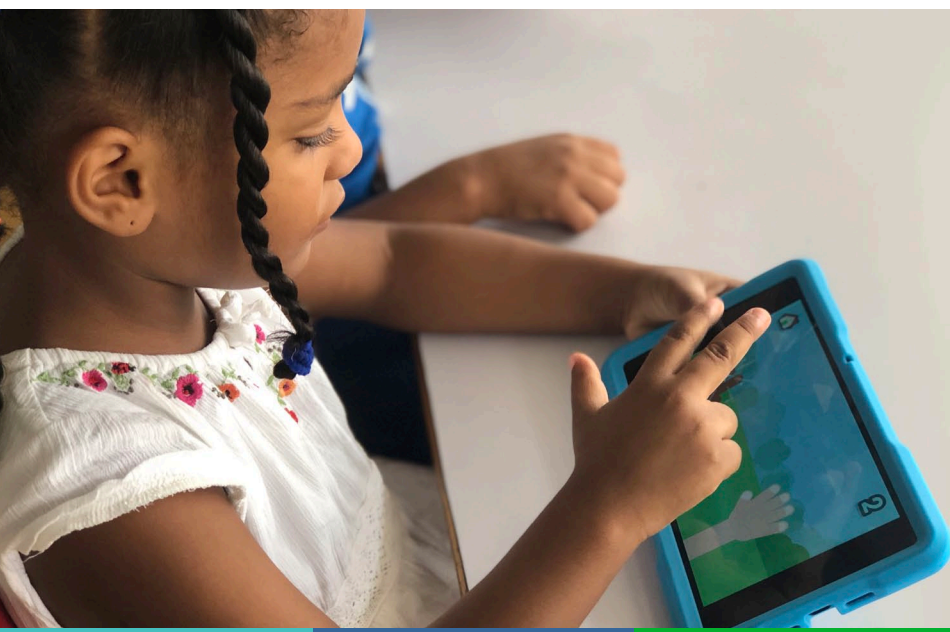


3/4 of the children became confident users of tablets and apps in the first two months.



students learn new subject knowledge through the technology, and this in turn supports their academic development.

When we consider the lack of technology that children in our programme have in their homes, the opportunity to use technology and gain these basic but important life skills is quite significant.



In summary learners spent:



686 HOURS
on tablets



232 HOURS
on numeracy app



180 HOURS
on literacy app

Measuring Numeracy: **Where Technology Can Really Count**

While the number of ways to teach mathematics to children is endless, teachers often agree that critical to all methods is to be able to 'turn children onto' the idea of mathematics. This means assisting children to develop a positive mindset about maths and helping children enjoy it from the outset.

Maths is crucial for children to gain access to the broader curriculum, it supports their analytical, reasoning, thinking and problem-solving skills, and it is unquestionably integral to children's future work and personal lives. The link between lack of maths skills and poverty, unemployment, low wages, health and crime, is well described by Andreas Schleicher, OECD "Good numeracy is the best protection against unemployment, low wages and poor health". The use of technology in maths gives teachers a new opportunity, to deliver and support maths teaching and learning. When surveyed, 70% of children in South Africa and 92% of Colombian children in our programme told us that using technology, makes maths more enjoyable, it provides new information and supports what they have already learned.

In 2018 we undertook two studies with partner schools and the results showed that 100% of learners progressed, including: 2.8 month increase in one school; 7.8 months recorded as the highest increase of a student; overall accuracy levels of 82%. In 2019 we took a major step to roll out our maths app programme globally and in Colombia we piloted the newly released Spanish version of DoodleMaths.

We studied 128 students, across three different schools, and six classes. Each was given an app assessed starting age based on their maths skills/knowledge. The app then collected data on usage, accuracy, the time a child takes to answer a question, gap analysis aligned to the English curriculum and child progress. In terms of progress, the app provided analysis of each child's development in years, months and/or days. The results are shared below:

Lowest age at start of study		Highest age at end of study	
Year 4	Year 5	Year 4	Year 5
4.6	7.7	10.3	10.8

3.7 MONTHS

was the average that learners progressed overall

2 YEARS

was the greatest progress made by any one learner

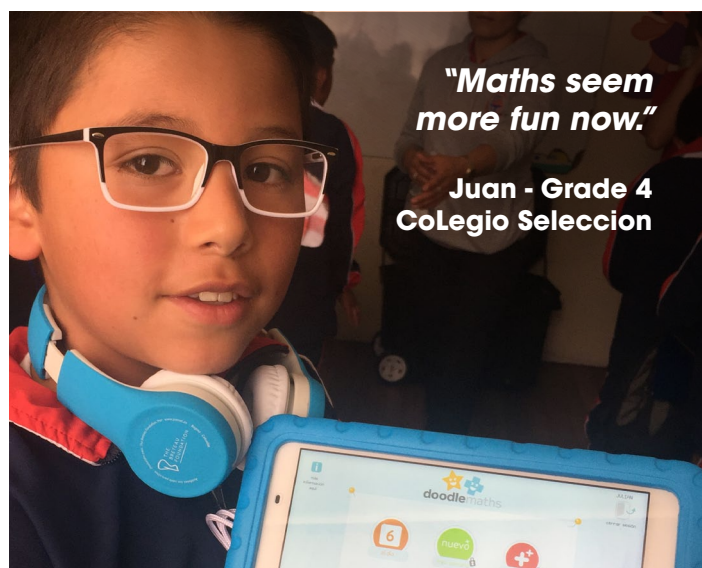
1 YEAR

progress was achieved by 6% of Year 4/5 learners

6 MONTHS

progress was achieved by 18% of Year 4 and 13% of Year 5 learners

We will expand our numeracy programme and increase our teacher training to ensure schools make the most of the data the apps provide. We believe that use of apps and data has supported learner's engagement and motivation which has logically increased their maths knowledge and skills.



Our Partners

Working in partnership makes a significant difference to the programme we can provide. Great partnerships help strengthen our support to the world's most disadvantaged learners and schools.

In 2019, we would like to thank all of our amazing partners: from innovative content developers and app providers, to technology entrepreneurs and grassroots organisations who work with us in the field.

We also extend our thanks to all of our partner schools around the world. We are very grateful for the relationships we build with your senior leaders, teachers and the wider communities who afford us their time and support to deliver the best possible outcome we can, to your learners.

It is all of our partners together who help make the Breteau Foundation Programme the best it can be. We look forward to your continued collaboration, expertise, enthusiasm and kindness in 2020.

