![Uwezo Tanzania logo]

JIFUNZE INITIATIVES REPORT FOR INTERVENTION

In **Chamwino**, **Kisarawe**, **Kilolo**, **Mbarali**, **Ludewa** and **Mvomero** Districts.

2019-2022

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INTRODUCTION

Uwezo Tanzania's focus on learning outcomes and supporting children in realizing their full potential has been central to our vision of reaching all children. The idea to implement the Jifunze initiative arose after several years of conducting learning assessments, which revealed that while children are attending school, effective learning is not consistently taking place. One of the intervention programs that has shown a significant impact in supporting children who are falling behind is Teaching at the Right Level (TaRL).

Teaching at the Right Level (TaRL) is an instructional approach, whereby children are taught based on their learning levels rather than their grade level or age. Children are initially assessed so as to determine their learning levels, and then they are allocated into groups based on their learning levels. Children are then taught to acquire foundational literacy and numeracy skills in an interactive and participatory manner, within those learning level groups. Teaching at the Right Level (TaRL) is a kind of 'targeted instruction'.

Teaching at the Right Level (TaRL) was pioneered in India by a Non-governmental Organisation called Pratham. According to Pratham, Abul Khair Jalaluddin (a literacy expert) was the person who initially came up with this pedagogic technique (Banerji et al. 2004 and Banerjee et al., 2017). It was observed that school enrolment was increasing but many children were not learning. Teaching seemed to be benefiting the best performing Children, while other Children who have weak foundational skills were left out. Hence there was a need to "teach at the right level" so that no children are left behind. TaRL has been practised in many countries including India, Ghana, Kenya, Tanzania and Zambia.

According to UNESCO, illiteracy rate in Tanzania is 22.4 % means that 5.5 million residents over 15 years cannot read or write. But also Uwezo 2019 report show that the average pass rate of standard 7 children in (Kiswahili, English and numeracy) was 69%. The test was benchmarked at standard II curriculum. This means more than 31% of children complete standard 7 without basic numeracy and literacy skills; hence this triggered Uwezo to come up with intervention program called "Jifunze" which mean "learn"

In Tanzania the Uwezo (2019) report shows that 31% (around 3 out of every 10 Children) aged 9-13 years old who graduated from primary school lacked basic reading and numeracy skills. For example only 62% of children aged 9-13 years old, including out of school children were able to read a simple story in Swahili, 14% of children who are leaving standard 7 (primary school) cannot read a standard two level Swahili story, 53% of children who are leaving standard 7 cannot read a standard two level English story, 20% of standard 7 children could not pass a standard 2 numeracy test This means that teaching at the right level is important in Tanzania to support those children lacking foundational learning.

Jifunze/TaRL helps Tanzania to achieve Sustainable Development Goal (SDG) 4 which states that "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". Particularly SDG goal 4.1 which states that "by 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes" (United Nations, 2015; 2020). And helps Tanzania to achieve SDG indicator 4.1.1 at the primary school level in reading (Swahili) and in mathematics. SDG indicator 4.1.1 aims at achieving at least a minimum proficiency level in reading and mathematics. SDG indicator 4.1.1 states that "proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex" (United Nations, 2015; 2020). By doing so, "Jifunze" also helps Tanzania to achieve SDG goal 4.6 "by 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy". And in particular SDG indicator 4.6.1 among the youth. SDG indicator 4.6.1 states that "proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex" (United Nations, 2015; 2020).

In Tanzania TaRL is relatively new. It was introduced by Uwezo in 2019. TaRL/Jifunze fits in very well with the Tanzanian Education Sector Development Plan (ESDP) 2016/17 – 2020/21 (URT, 2018). As "Jifunze" greatly enables children who are left behind to learn the 3R skills of reading, writing and arithmetic; and thus boosts learning outcomes in Tanzania. "Jifunze" greatly uses participatory teaching and learning (learning games, learning based activities, teaching aids and learning songs) and is also a simplified version of a competence based curriculum and thus is in great harmony with both the ESDP and the Tanzanian Education and training policy of 2014 (URT, 2014; 2018).

TARL INTERVENTION DESIGN

Sampling

The TaRL intervention targeted primary school Children between standard 3 and standard 6.

TaRL/Jifunze literacy and numeracy intervention was implemented in 6 districts and 30 government schools as the table below shows:

District	Schools
Chamwino	Amani, Chilobi, Chiwondo, Mondomela and Mwiyendaje
Kisarawe	Kidugalo, Madugike, Maneromango, Mitengwe and Mtakayo
Mvomero	Dibamba, hembeti, Kipera, Lubungo and Mgeta

TaRL literacy intervention occurred in 3 districts and 15 government schools as the table below shows:

District	School
Kilolo	Masakuzi, Itungi, Luganga, Kilolo A and Kilolo B
Ludewa	Matika, Shaurimoyo, Mkongobaki, Maholong'wa and Songambele
Mbarali	Nsonyanga, Chosi A, Kanioga, Rujewa and Mpakani

Implementers

To ensure quality delivery of the project, Uwezo involved various stakeholders and partners in its execution. These stakeholders included representatives from different levels, such as civil society organizations (CSOs) and government officials, each contributing according to their roles and responsibilities.

Government officials

District Education Officers (DEOs), District Academic Officers (DAOs), Ward Education Officers (WEOs) and 2 school teachers in selected schools were the main implementers of Uwezo TaRL/Jifunze initiative. The DAOs and WEOs education plans involve improving the learning outcomes of children in the primary schools of their areas. They have different task as follow;

The Jifunze/TaRL classes lasted for a maximum of 30 days. Children were tested after every 10 days of Jifunze/TaRL class. Those who had not graduated were continued with Jifunze class for another 10 days and tested again after 10 days. In the Jifunze literacy classes the children were divided into three groups depending on their learning level. These groups were the syllable, word and paragraph groups in literacy; and the addition, subtraction and multiplication groups in numeracy.

Teachers

The Jifunze/TaRL camp class involved two teachers, one teacher is a fully qualified government primary school teacher and another teacher is a volunteer teacher who is also a fully qualified teacher. In case of the big another third teacher was involved (whether a fully qualified government primary school teacher or a fully qualified volunteer teacher). The "Jifunze" class took place after the regular school hours had ended, usually from 1520 to 1620, Monday to Friday.

Initially, all children between standard 3 and 6 participated in a baseline assessment. The aim was to identify children who have no basic skills in reading, writing and arithmetic. The baseline assessment assessed basic skills that a child in standard 2 is supposed to have. Children who failed the baseline assessment were put in "Jifunze"/TaRL classes depending on their learning level. In literacy there were 6 learning levels: cannot read, syllable, word, paragraph, story only and story with comprehension. Children who did well at the story level and above were not included in "Jifunze" literacy classes. In numeracy there were 8 learning levels: cannot count, can count, number recognition, missing numbers, addition, subtraction, multiplication and division. Children who did well at the subtraction level and above were not included in "Jifunze" numeracy classes.

Local organization

The organization worked to coordinate all activities within the district. This included securing permits from district authorities, identifying teachers, and overseeing all project activities in the area. Since the initiative was implemented across different districts, here are the partners involved and their respective districts.

District	Partners
Chamwino	Women Wake Up
Mvomero	Sawa Wanawake
Kisarawe	Champion Chanzige Organization
Mbarali	Elimisha
Kilolo	Iringa Mercy Organisation (IMO)
Ludewa	Lugarawa Development Fund (LDF)

DATA

The teachers assessed the children according to "Jifunze" guideline. Each child had a unique identification number. The teachers recorded the data in paper in two forms. The first form (the information questionnaire form) was used to record the information of the children who did the baseline assessment whereby the name, age, gender, grade and learning level of the child were recorded. They also recorded whether or not the child has a visible disability. They also recorded the date of the baseline assessment, district name, school name, teacher's name and teacher's telephone number. The second form (the register form) was used to register the children who were enrolled in the Jifunze class. In this form they recorded the name, age, gender, grade, learning level of the child (after 10, 20 or 30 days of Jifunze class and assessment), they also recorded the child's attendance dates in the Jifunze class and the total number of days attended. They also recorded the assessment dates, the assessment rounds (after 10, 20 or 30 days of Jifunze class), the Jifunze learning group of the child (whether syllable, word or paragraph group in literacy or addition, subtraction and multiplication in numeracy), district name, school name, teachers' names and teachers' telephone numbers.

Information in these two paper forms (which was written in Swahili) was compiled and data analyzed using Stata. For literacy, total 3,278 children were assessed at the baseline. The Jifunze literacy class had 624 children. After 10 days 624 children were assessed (the results of 2 children are missing), after 20 days 403 children were assessed (the results of 2 children are missing) and after 30 days 223 children were assessed (the results of 1 child were missing). These literacy assessments were done in Chamwino, Kisarawe and Mvomero districts.

For numeracy, total 3,675 children were assessed at the baseline (the results of 5 children are missing). The numeracy Jifunze class had 1,535 children. After 10 days 1,535 children were assessed (the results of 7 children are missing), after 20 days 1,104 children were assessed (the results of 11 children are missing) and after 30 days 598 were assessed (the results of 4 children are missing). These numeracy assessments were done in Chamwino, Kisarawe and Mvomero districts.

COVARAGE

"Jifunze" initiative was implemented in 30 government primary schools from 6 districts. The table below details the coverage of "Jifunze" implementation

S/N	REGION	DISTRICT	SCHOOL
1	PWANI	KISARAWE	5
2	IRINGA	KILOLO	5
3	NJOMBE	LUDEWA	5
4	MOROGORO	MVOMERO	5
5	MBEYA	MBARALI	5
6	DODOMA	CHAMWINO	5

Table 1: *Number of schools that implemented Jifunze literacy (15 schools).*

Primary school	Baseline	After 10 days	After 20 days	After 30 days	Total
Amani	114	35	27	18	194
Chiboli	345	58	50	39	492
Chiwondo	319	100	34	24	477
Mondomela	117	39	25	11	192
Mwiyendaje	179	32	15	0	226
Kidugalo	0	48	23	0	71
Madugike	204	24	19	9	256
Maneromango	177	24	21	11	233
Mitengwe	252	1	0	0	253
Mtakayo	128	89	48	16	281
Dibamba	167	31	26	15	239
Hembeti	287	39	13	9	348
Kipera	486	15	13	13	527
Lubungo	289	41	37	31	398
Mgeta	213	48	50	27	338
Total	3,277	624	401	223	4,525

For Jifunze numeracy the top three schools which had the largest Jifunze class were Chiwondo (184 children), Hembeti (159 children) and Chiboli (152 children). Chiwondo and Chiboli are in Chamwino district and Hembeti is in Mvomero district. The total number of children in the Jifunze numeracy class in all 15 schools was 1,535 children. The total number of children in the Jifunze numeracy class (1,535) was more than that of the Jifunze literacy class (624).

Children assessed by district

Total number of 14463 children were assessed in all 6 districts. Girls children assessed were 6753 and boys assessed were 7710. A total number of 4840 were enrolled to Jifunze class as numeracy 3278 and literacy 1562. The table below details number of children by district.

Children enrolled in Jifunze class by district

DISTRICT	SUBJECT	GIRLS	BOYS	TOTAL
CHAMWINO	NUMERACY	299	245	544
	LITERACY	113	151	264
KISARAWE	NUMERACY	198	239	437
	LITERACY	64	122	186
MVOMERO	NUMERACY	285	270	555
	LITERACY	53	121	174
LUDEWA	NUMERACY	249	254	503
	LITERACY	128	178	306
KILOLO	NUMERACY	337	385	722
	LITERACY	72	190	262
MBARALI	NUMERACY	260	257	517
	LITERACY	149	221	370
TOTAL	NUMERACY	1628	1650	3278
	LITERACY	579	983	1562

Total number of 4840 children were enrolled in Jifunze classes in both Numeracy and Literacy as shown in the above table

Graph show enrolled children by district

Children erolled by subject

CHAMWINO 264 / 544   KISARAWE 186 / 437   MVOMERO 174 / 555   LUDEWA 306 / 503   KILOLO 262 / 722   MBARALI 370 / 517   TOTAL 1562 / 3278
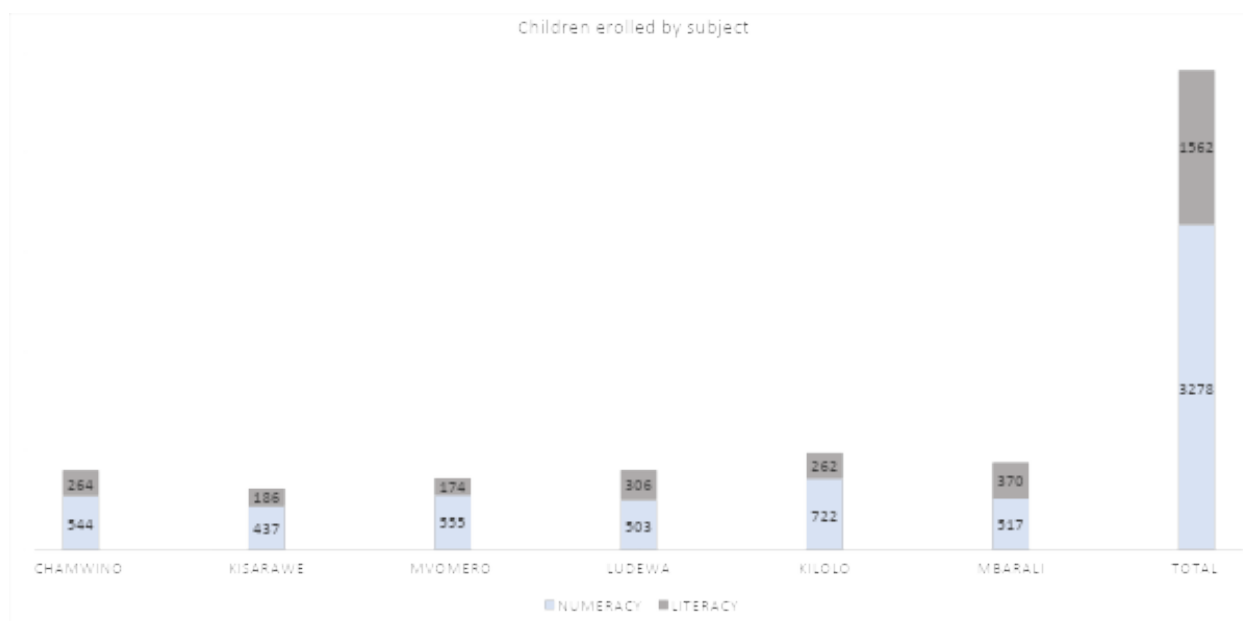
■ NUMERACY ■ LITERACY

District performance

'Jifunze' classes in these districts enrolled about 4840 children in Numeracy and Literacy. An average of 90% children succeeded to master Numeracy and Literacy skills after 30 days of assessment. Mbarali district lead by 97% of children mastered Numeracy and Literacy skills and Chamwino district was the least by 81%

District performance- Success rate
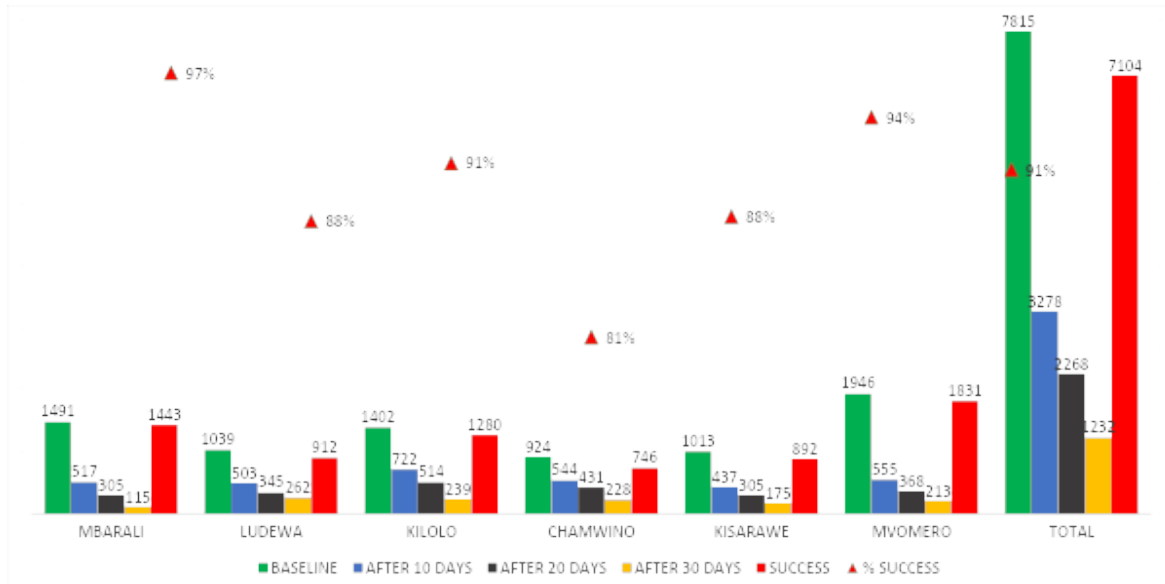
District performance
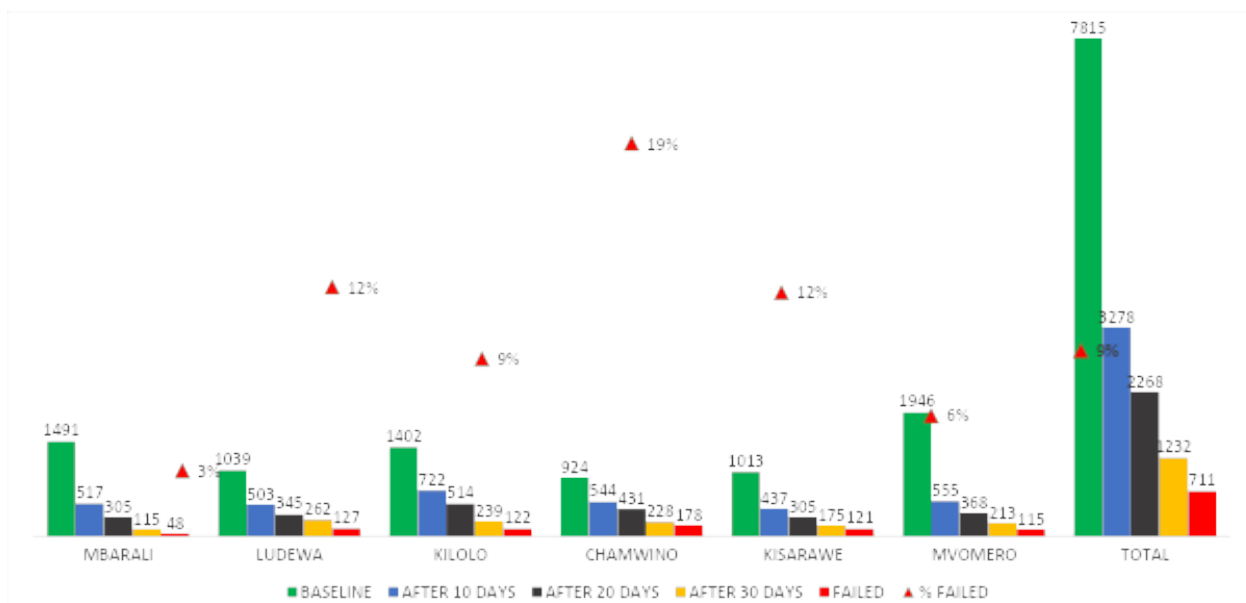
Table xx: Number of schools that implemented Jifunze numeracy (15 schools).

Primary school	Baseline	After 10 days	After 20 days	After 30 days	Total
Amani	140	107	100	20	367
Chiboli	348	152	100	60	660
Chiwondo	214	184	169	93	660
Mondomela	102	43	18	9	172
Mwiyendaje	120	58	44	28	250
Kidugalo	119	80	62	43	304
Madugike	218	77	53	26	374
Maneromango	226	66	44	23	359
Mitengwe	301	128	105	67	601
Mtakayo	149	86	41	16	292
Dibamba	172	92	40	19	323
Hembeti	331	159	67	19	576
Kipera	559	85	47	20	711
Lubungo	292	130	130	92	644
Mgeta	384	88	84	63	619
Total	3,675	1,535	1,104	598	6,912

Jifunze teachers

The total number of teachers enrolled to implement Jifunze literacy was 35 in all the three districts. 19 were male and 16 were female. 15 were government teachers and 20 were volunteer teachers. Chamwino and Kisarawe each had 10 teachers, while Mvomero had 15 teachers (see table 3). Chamwino district had the largest number of Children in the Jifunze literacy class (264), followed by Kisarawe (186) and then Mvomero (174). Chiwondo primary school had 100 children in the Jifunze literacy class and it had 2 Jifunze teachers.

Table 3: *Number of teachers enrolled to implement Jifunze literacy in each school by gender and district.*

Primary school	Government		Volunteer		Total
	Male	Female	Male	Female	
Chamwino district					
Amani	1	0	1	0	2
Chiboli	1	0	1	0	2
Chiwondo	0	1	1	0	2
Mondomela	0	1	1	0	2
Mwiyendaje	1	0	0	1	2
Total	3	2	4	1	10
Kisarawe district					
Kidugalo	1	0	1	0	2
Madugike	0	1	0	1	2
Maneromango	0	1	0	1	2
Mitengwe	1	0	1	0	2
Mtakayo	0	1	1	0	2
Total	2	3	3	2	10
Mvomero district					
Dibamba	0	1	2	0	3
Hembeti	0	1	0	2	3
Kipera	0	1	1	1	3
Lubungo	1	0	1	1	3
Mgeta	0	1	2	0	3
Total	1	4	6	4	15
Grand total	6	9	13	7	35

The total number of teachers enrolled to implement Jifunze numeracy was 41 in all the three districts. 22 were male and 19 were female. 15 were government teachers and 26 were volunteer teachers. Kisarawe had 16 teachers, Mvomero had 15 teachers and Chamwino had 10 teachers (see table 4). Mvomero had the largest number of Children in the Jifunze literacy class (554), followed by Chamwino (544) and then Kisarawe (437).

Note that in Chamwino and Mvomero districts, the same teachers that were enrolled in Jifunze literacy were also enrolled in Jifunze numeracy. Thus the total number of Jifunze teachers in Chamwino is 10 and in Mvomero it is 15. In Kisarawe only 2 government teachers and 5 volunteer teachers were enrolled in both Jifunze literacy and Jifunze numeracy. Thus the total number of Jifunze teachers in Kisarawe is 19. Hence the grand total of teachers in both Jifunze literacy and numeracy in the 3 districts is 44. In all 3 districts, the Jifunze literacy class and the Jifunze numeracy class were conducted at different times of the year, their time period did not overlap.

Table 4: *Number of teachers enrolled to implement Jifunze numeracy in each school by gender and district.*

Primary school	Government		Volunteer		Total
	Male	Female	Male	Female	
Chamwino district					
Amani	1	0	1	0	2
Chiboli	1	0	1	0	2
Chiwondo	0	1	1	0	2
Mondomela	0	1	1	0	2
Mwiyendaje	1	0	0	1	2
Total	3	2	4	1	10
Kisarawe district					
Kidugalo		1	2		3
Madugike		1		2	3
Maneromango		1	1	1	3
Mitengwe	1		2	1	4
Mtakayo	1		1	1	3
Total	2	3	6	5	16
Mvomero district					
Dibamba	0	1	2	0	3
Hembeti	0	1	0	2	3
Kipera	0	1	1	1	3
Lubungo	1	0	1	1	3
Mgeta	0	1	2	0	3
Total	1	4	6	4	15
Grand total	6	9	16	10	41

Few children had visible disabilities. In the Jifunze numeracy assessment, at the baseline, Kisarawe had 11 children (1.09% of its children) with visible disabilities, followed by Mvomero (6 children, 0.35% of its children) and then Chamwino (4 children, 0.43% of its children) (see table 5). In Chamwino, the number of boys and girls with visible disabilities was equal, the same holds for Mvomero. While in Kisarawe the number of boys with visible disabilities was greater (by one) than the number of girls with visible disabilities. Data on disabilities was not collected in Jifunze literacy.

Table 5: Number of Children with disabilities by gender per district (at the baseline) in Jifunze numeracy.

Chamwino district	Female		Male		Total	
Pupil has visible disability	Freq.	(%)	Freq.	(%)	Freq.	(%)
No	499	99.6	421	99.53	920	99.57
Yes	2	0.4	2	0.47	4	0.43
Total	501	100	423	100	924	100
Kisarawe district	Female		Male		Total	
Pupil has visible disability	Freq.	(%)	Freq.	(%)	Freq.	(%)
No	467	98.94	535	98.89	1,002	98.91
Yes	5	1.06	6	1.11	11	1.09
Total	472	100	541	100	1,013	100
Mvomero district	Female		Male		Total	
Pupil has visible disability	Freq.	(%)	Freq.	(%)	Freq.	(%)
No	854	99.65	878	99.66	1,732	99.65
Yes	3	0.35	3	0.34	6	0.35
Total	857	100	881	100	1,738	100

Children assessed by Class Level

In literacy, at the baseline assessment, standard 3 has the highest total number of children (1064), followed by standard 4 (862 children), standard 5 (741 children) and then standard 6 (609 children) (see table 6). As you move from lower to higher grades the number of children assessed gradually falls. In standard 3 the total number of boys assessed is greater than that of girls. While in standard 4, the total number of girls assessed is greater than that of boys, the same applies in standard 5 and in standard 6.

Table 6: Number of children assessed by gender and grade from each school, in Jifunze literacy.

Literacy	Standard 3		Standard 4		Standard 5		Standard 6	
Primary school	Female	Male	Female	Male	Female	Male	Female	Male
Amani	27	30	14	5	11	8	10	8
Chiboli	74	48	57	29	60	32	23	22
Chiwondo	40	58	46	47	27	30	34	37
Mondomela	12	18	22	12	18	17	9	9
Mwiyendaje	30	36	31	28	19	14	13	8
Madugike	32	37	15	32	23	24	23	18
Maneromango	25	23	21	28	17	21	26	16
Mitengwe	42	40	40	31	20	36	22	21
Mtakayo	15	24	11	33	14	7	15	9
Dibamba	30	25	15	19	13	25	22	18
Hembeti	32	33	41	35	34	37	41	34
Kipera	70	87	61	55	61	65	46	41
Lubungo	52	55	51	36	37	12	21	25
Mgeta	43	26	22	25	25	34	18	20
Total	524	540	447	415	379	362	323	286

Children assessed by Gender

In numeracy, at the baseline assessment, standard 3 has the highest total number of children (1049), followed by standard 4 (1007 children), standard 5 (837 children) and then standard 6 (782 children) (see table 7). As you move from lower to higher grades the number of children assessed gradually falls. In standard 3 the total number of girls assessed is greater than that of boys, the same applies in standard 5. In standards 4, the total number of girls assessed is nearly the same as that of boys, the number of girls is one more person than that of boys. In standard 6, the total number of boys assessed is greater than that of girls.

Table 7: Number of children assessed by gender and grade from each school, in Jifunze numeracy.

Numeracy	Standard 3		Standard 4		Standard 5		Standard 6	
Primary school	Female	Male	Female	Male	Female	Male	Female	Male
Amani	34	23	26	20	12	7	11	7
Chiboli	40	40	51	37	52	23	52	53
Chiwondo	48	66	15	14	22	19	16	14
Mondomela	9	8	11	17	20	13	14	10
Mwiyendaje	19	21	18	14	19	11	12	6
Kidugalo	11	12	12	18	10	24	19	13
Madugike	20	24	36	41	19	33	25	20
Maneromango	39	26	25	26	21	31	19	39
Mitengwe	38	45	45	45	43	33	17	35
Mtakayo	17	12	19	19	18	31	19	14
Dibamba	20	31	28	21	15	20	14	23
Hembeti	54	48	39	39	36	38	35	42
Kipera	82	81	71	85	59	56	54	71
Lubungo	40	25	47	57	40	32	34	17
Mgeta	59	57	61	50	38	42	31	46
Total	530	519	504	503	424	413	372	410

Children enrolled to Jifunze literacy class by grades

In the Jifunze literacy class, 52.72% of the children enrolled were in standard 3 (329 children), 28.04% of the children enrolled were in standard 4 (175 children), 14.9% were in standard 5 (93 children) and 4.33% (27 children) in standard 6 (see table 8). As you move from lower to higher grades the number of children enrolled falls. This is somehow expected as for some children the more they stay at school the more likely they will master the basic literacy skills. And thus the more likely they will pass the baseline literacy assessment and hence not be enrolled in the Jifunze literacy class. Note that the children who are enrolled in the Jifunze literacy class come from various grades (from standard 3 to standard 6). This justifies the rationale for Jifunze, which is, we need to teach the children at the right level. The total number of boys enrolled in the Jifunze literacy class is more than the number of girls. 63.14% of the Children enrolled (394 out of 624 children) are boys, while 36.86% of the Children enrolled are girls (230 out of 624 children). The percentage of boys enrolled from each grade is at least 60% of the Children enrolled from that particular grade.

Table 8: Children enrolled to Jifunze literacy class by grades.

Jifunze literacy	Female		Male		Total	
Grade	Freq.	(%)	Freq.	(%)	Freq.	(%)
Standard 3	120	52.17	209	53.05	329	52.72
Standard 4	69	30	106	26.9	175	28.04
Standard 5	32	13.91	61	15.48	93	14.9
Standard 6	9	3.91	18	4.57	27	4.33
Total	230	100	394	100	624	100

In the Jifunze numeracy class, 44.17% of the children enrolled were in standard 3 (678 children), 27.23% of the children enrolled were in standard 4 (418 children), 20.13% were in standard 5 (309 children) and 8.47% (130 children) in standard 6 (see table 9). As you move from lower to higher grades the number of children enrolled falls. This is somehow expected as for some children the more they stay at school the more likely they will master the basic numeracy skills. And thus the more likely they will pass the baseline numeracy assessment and hence not be enrolled in the Jifunze numeracy class. Note that the children who are enrolled in the Jifunze numeracy class come from various grades (from standard 3 to standard 6). This justifies the rationale for Jifunze, which is, we need to teach the children at the right level. The total number of girls enrolled in the Jifunze numeracy class is more than the number of boys. 50.88% of the Children enrolled are girls (781 out of 1,535 children), while 49.12% of the Children enrolled (754 out of 1,535 children) are boys. The percentage of girls enrolled in standards 3 and 5 is slightly higher than that of boys. While the percentage of boys enrolled in standards 4 and 6 is slightly higher than that of girls.

Table 9: Children enrolled to Jifunze numeracy class by grades.

Jifunze numeracy	Female		Male		Total	
Grade	Freq.	(%)	Freq.	(%)	Freq.	(%)
Standard 3	352	45.07	326	43.24	678	44.17
Standard 4	202	25.86	216	28.65	418	27.23
Standard 5	164	21	145	19.23	309	20.13
Standard 6	63	8.07	67	8.89	130	8.47
Total	781	100	754	100	1,535	100

Children progress in Learning camps

Literacy camps

For Jifunze literacy, the baseline assessment shows that in Chamwino 62.29% of the children (669 children) passed at the story level and above. Amani primary school had the highest pass rate of 69.3% (79 children), followed by Mondomela 67.52% (79 children), Chiwondo 63.01% (201 children), Chiboli 62.03% (214 children) and then Mwiyendaje 53.64% (96 children) (see table 10).

Table 10: Children learning levels by subject per school, in Chamwino district (at the baseline) in Jifunze literacy.

Chamwino	Amani		Chiboli		Chiwondo		Mondomela		Mwiyendaje		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	8	7.02	35	10.14	45	14.11	10	8.55	38	21.23	136	12.66
Syllable	3	2.63	20	5.8	20	6.27	5	4.27	13	7.26	61	5.68
Word	10	8.77	16	4.64	30	9.4	3	2.56	8	4.47	67	6.24
Paragraph	14	12.28	60	17.39	23	7.21	20	17.09	24	13.41	141	13.13
Story only	4	3.51	137	39.71	36	11.29	34	29.06	63	35.2	274	25.51
Story with comprehension	75	65.79	77	22.32	165	51.72	45	38.46	33	18.44	395	36.78
Total	114	100	345	100	319	100	117	100	179	100	1,074	100

For Jifunze literacy, the baseline assessment shows that in Kisarawe 73.98% of the children (563 children) passed at the story level and above. Madugike primary school had the highest pass rate of 88.24% (180 children), followed by Maneromango 84.74% (150 children), Mitengwe 75% (189 children) and then Mtakayo 34.38 % (44 children) (see table 11). Children in Kidugalo primary school were not assessed during the literacy baseline.

Table 11: Children learning levels by subject per school, in Kisarawe district (at the baseline) in Jifunze literacy.

Kisarawe	Kidugalo		Madugike		Maneromango		Mitengwe		Mtakayo		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	-	-	9	4.41	6	3.39	24	9.52	7	5.47	46	6.04
Syllable	-	-	1	0.49	3	1.69	7	2.78	4	3.13	15	1.97
Word	-	-	2	0.98	8	4.52	12	4.76	32	25	54	7.1
Paragraph	-	-	12	5.88	10	5.65	20	7.94	41	32.03	83	10.91
Story only	-	-	52	25.49	51	28.81	94	37.3	32	25	229	30.09
Story with comprehension	-	-	128	62.75	99	55.93	95	37.7	12	9.38	334	43.89
Total	-	-	204	100	177	100	252	100	128	100	761	100

For Jifunze literacy, the baseline assessment shows that in Mvomero 81.83% of the children (1180 children) passed at the story level and above. Kipera primary school had the highest pass rate of 96.5% (469 children), followed by Lubungo 79.58% (230 children), Dibamba 78.45% (131 children), Hembeti 70.03% (201 children) and then Mgeta 69.95% (149 children) (see table 12). For Jifunze literacy Mvomero had the highest pass rate at the baseline assessment, followed by Kisarawe and then Chamwino. Kipera primary school (of Mvomero) had the highest pass rate among all the schools in the three districts.

Table 12: Children learning levels by subject per school, in Mvomero district (at the baseline) in Jifunze literacy.

Mvomero	Dibamba		Hembeti		Kipera		Lubungo		Mgeta		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	0	0	28	9.76	2	0.41	24	8.3	25	11.74	79	5.48
Syllable	1	0.6	8	2.79	5	1.03	9	3.11	2	0.94	25	1.73
Word	22	13.17	11	3.83	2	0.41	20	6.92	14	6.57	69	4.79
Paragraph	13	7.78	39	13.59	8	1.65	6	2.08	23	10.8	89	6.17
Story only	61	36.53	99	34.49	21	4.32	0	0	79	37.09	260	18.03
Story with comprehension	70	41.92	102	35.54	448	92.18	230	79.58	70	32.86	920	63.8
Total	167	100	287	100	486	100	289	100	213	100	1,442	100

Numeracy Camps

For Jifunze numeracy, the baseline assessment shows that in Chamwino 51.29% of the children (474 children) passed at the subtraction level and above. Mondomela primary school had the highest pass rate of 76.46% (78 children), followed by Chiboli 62.65% (218 children), Mwiyendaje 55% (66 children), Amani 35.71% (50 children) and then Chiwondo 28.97% (62 children) (see table 13).

Table 13: Children learning levels by subject per school, in Chamwino district (at the baseline) in Jifunze numeracy.

Chamwino	Amani		Chiboli		Chiwondo		Mondomela		Mwiyendaje		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	0	0	0	0	0	0	0	0	1	0.83	1	0.11
Can count	3	2.14	12	3.45	24	11.21	4	3.92	1	0.83	44	4.76
Number recognition	2	1.43	4	1.15	10	4.67	2	1.96	3	2.5	21	2.27
Missing numbers	72	51.43	26	7.47	103	48.13	12	11.76	23	19.17	236	25.54
Addition	13	9.29	88	25.29	15	7.01	6	5.88	26	21.67	148	16.02
Subtraction	6	4.29	43	12.36	7	3.27	9	8.82	19	15.83	84	9.09
Multiplication	15	10.71	94	27.01	2	0.93	38	37.25	29	24.17	178	19.26
Division	29	20.71	81	23.28	53	24.77	31	30.39	18	15	212	22.94
Total	140	100	348	100	214	100	102	100	120	100	924	100

For Jifunze numeracy, the baseline assessment shows that in Kisarawe 61.3% of the children (621 children) passed at the subtraction level and above. Maneromango primary school had the highest pass rate of 69.91% (158 children), followed by Madugike 66.97% (146 children), Mitengwe 59.14% (178 children), Mtakayo 57.05% (85 children), and then Kidugalo 45.38% (54 children) (see table 14).

Table 14: Children learning levels by subject per school, in Kisarawe district (at the baseline) in Jifunze numeracy.

Kisarawe	Kidugalo		Madugike		Maneromango		Mitengwe		Mtakayo		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot count	1	0.84	2	0.92	3	1.33	0	0	1	0.67	7	0.69
Can count	5	4.2	2	0.92	2	0.88	0	0	0	0	9	0.89
Number recognition	2	1.68	4	1.83	5	2.21	0	0	0	0	11	1.09
Missing numbers	33	27.73	24	11.01	40	17.7	81	26.91	46	30.87	224	22.11
Addition	24	20.17	40	18.35	18	7.96	42	13.95	17	11.41	141	13.92
Subtraction	6	5.04	14	6.42	8	3.54	1	0.33	13	8.72	42	4.15
Multiplication	18	15.13	49	22.48	6	2.65	3	1	22	14.77	98	9.67
Division	30	25.21	83	38.07	144	63.72	174	57.81	50	33.56	481	47.48
Total	119	100	218	100	226	100	301	100	149	100	1,013	100

For Jifunze numeracy, the baseline assessment shows that in Mvomero 55.75% of the children (969 children) passed at the subtraction level and above. Kipera primary school had the highest pass rate of 85.51% (478 children), followed by Mgeta 52.08% (200 children), Dibamba 51.16% (88 children), Hembeti 32.93% (109 children), and then Lubungo 32.18% (94 children) (see table 15). For Jifunze numeracy Kisarawe had the highest pass rate at the baseline assessment, followed by Mvomero and then Chamwino. Kipera primary school (of Mvomero) had the highest pass rate among all the schools in the three districts.

Table 15: Children learning levels by subject per school, in Mvomero district (at the baseline) in Jifunze numeracy.

Mvomero	Dibamba		Hembeti		Kipera		Lubungo		Mgeta		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	0	0	0	0	1	0.18	1	0.34	2	0.52	4	0.23
Cannot count	0	0	4	1.21	4	0.72	0	0	0	0	8	0.46
Can count	1	0.58	7	2.11	0	0	1	0.34	11	2.86	20	1.15
Number recognition	3	1.74	4	1.21	1	0.18	13	4.45	38	9.9	59	3.39
Missing numbers	50	29.07	110	33.23	26	4.65	102	34.93	79	20.57	367	21.12
Addition	30	17.44	97	29.31	49	8.77	81	27.74	54	14.06	311	17.89
Subtraction	9	5.23	24	7.25	7	1.25	6	2.05	7	1.82	53	3.05
Multiplication	36	20.93	30	9.06	13	2.33	13	4.45	38	9.9	130	7.48
Division	43	25	55	16.62	458	81.93	75	25.68	155	40.36	786	45.22
Total	172	100	331	100	559	100	292	100	384	100	1,738	100

For Jifunze literacy Mvomero had the highest pass rate of 81.83% (1180 children), who passed at the story level and above, at the baseline assessment, followed by Kisarawe 73.98% (563 children) and then Chamwino 62.29% (669 children) (see table 16).

Table 16: Children learning levels by subject per district (at the baseline), in Jifunze literacy.

Districts	Chamwino		Kisarawe		Mvomero		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	136	12.65	46	6.04	79	5.48	261	7.96
Syllable	61	5.67	15	1.97	25	1.73	101	3.08
Word	67	6.23	54	7.1	69	4.79	190	5.8
Paragraph	142	13.21	83	10.91	89	6.17	314	9.58
Story only	274	25.49	229	30.09	260	18.03	763	23.28
Story with comprehension	395	36.74	334	43.89	920	63.8	1,649	50.31
Total	1,075	100	761	100	1,442	100	3,278	100

For Jifunze numeracy Kisarawe had the highest pass rate of 61.3% (621 children), who passed at the subtraction level and above, at the baseline assessment, followed by Mvomero 55.75% (969 children) and then Chamwino 51.29% (474 children) (see table 17).

Table 17: Children learning levels by subject per district (at the baseline), in Jifunze numeracy.

Districts	Chamwino		Kisarawe		Mvomero		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.11	0	0	4	0.23	5	0.14
Cannot count	0	0	7	0.69	8	0.46	15	0.41
Can count	44	4.76	9	0.89	20	1.15	73	1.99
Number recognition	21	2.27	11	1.09	59	3.39	91	2.48
Missing numbers	236	25.54	224	22.11	367	21.12	827	22.5
Addition	148	16.02	141	13.92	311	17.89	600	16.33
Subtraction	84	9.09	42	4.15	53	3.05	179	4.87
Multiplication	178	19.26	98	9.67	130	7.48	406	11.05
Division	212	22.94	481	47.48	786	45.22	1,479	40.24
Total	924	100	1,013	100	1,738	100	3,675	100

Children with disabilities

In the Jifunze numeracy class there were 13 children with visible disabilities. After 10 days of Jifunze numeracy class, 7 children (53.85%) passed at the subtraction level and above. After 20 days of Jifunze numeracy class, 8 children (72.73%) passed at the subtraction level and above. After 30 days of Jifunze numeracy class, 7 children (70%) passed at the subtraction level and above (see table 18). There is no disabilities data for Jifunze literacy.

Table 18: Children progress for those with disabilities in Jifunze numeracy.

Children with disabilities	After 10 days		After 20 days		After 30 days		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot count	1	7.69	0	0	0	0	1	2.94
Can count	1	7.69	0	0	0	0	1	2.94
Number recognition	0	0	0	0	0	0	0	0
Missing numbers	2	15.38	0	0	1	10	3	8.82
Addition	2	15.38	3	27.27	2	20	7	20.59
Subtraction	4	30.77	7	63.64	5	50	16	47.06
Multiplication	0	0	0	0	0	0	0	0
Division	3	23.08	1	9.09	2	20	6	17.65
Total	13	100	11	100	10	100	34	100

Children progress after 10 days by learning levels and gender

Literacy camps

In the Jifunze literacy class, there were 624 children. 230 children were female (36.86%) and 394 children were male (63.14%). The number of boys was greater than that of girls. After 10 days of Jifunze literacy class 54 girls (23.48% of girls) passed at the story level and above, while 69 boys (17.51% of boys) passed at the story level and above (see table 19). Here, although the number of boys who passed was greater than that of girls, the pass rate of girls was greater than that of boys. The total number of children who passed at the story level and above is 123 children (19.71% of the children).

Table 19: Children progress after 10 days by learning levels and gender, in Jifunze literacy.

After 10 days	Female		Male		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	0	0	2	0.51	2	0.32
Cannot read	38	16.52	74	18.78	112	17.95
Syllable	34	14.78	68	17.26	102	16.35
Word	51	22.17	88	22.34	139	22.28
Paragraph	53	23.04	93	23.6	146	23.4
Story only	37	16.09	47	11.93	84	13.46
Story with comprehension	17	7.39	22	5.58	39	6.25
Total	230	100	394	100	624	100

After 20 days of Jifunze literacy class 49 girls (36.57% of girls) passed at the story level and above, while 72 boys (26.76% of boys) passed at the story level and above (see table 20). Here also, although the number of boys who passed was greater than that of girls, the pass rate of girls was greater than that of boys. The total number of children who passed at the story level and above is 121 children (30.03% of the children).

Table 20: Children progress after 20 days by learning levels and gender, in Jifunze literacy.

| After 20 days	Female		Male		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	0	0	2	0.74	2	0.5
Cannot read	24	17.91	49	18.22	73	18.11
Syllable	9	6.72	17	6.32	26	6.45
Word	17	12.69	47	17.47	64	15.88
Paragraph	35	26.12	82	30.48	117	29.03
Story only	21	15.67	30	11.15	51	12.66
Story with comprehension	28	20.9	42	15.61	70	17.37
Total	134	100	269	100	403	100

After 30 days of Jifunze literacy class 27 girls (36.99% of girls) passed at the story level and above, while 70 boys (46.66% of boys) passed at the story level and above (see table 21). Here, the number of boys who passed was greater than that of girls, and the pass rate of boys was greater than that of girls. The total number of children who passed at the story level and above is 97 children (43.5% of the children).

Table 21: Children progress after 30 days by learning levels and gender, in Jifunze literacy.

After 30 days	Female		Male		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	0	0	1	0.67	1	0.45
Cannot read	15	20.55	22	14.67	37	16.59
Syllable	8	10.96	18	12	26	11.66
Word	6	8.22	4	2.67	10	4.48
Paragraph	17	23.29	35	23.33	52	23.32
Story only	5	6.85	17	11.33	22	9.87
Story with comprehension	22	30.14	53	35.33	75	33.63
Total	73	100	150	100	223	100

The total pass rate of the children increases as the number of days of Jifunze literacy class increases from 10 to 20 to 30 days (see chart 1). The pass rate of boys also increases from 10 to 20 to 30 days, and so does the pass rate of girls.

Chart 1: Children's pass rate by gender, after each round of assessment, in Jifunze literacy class.
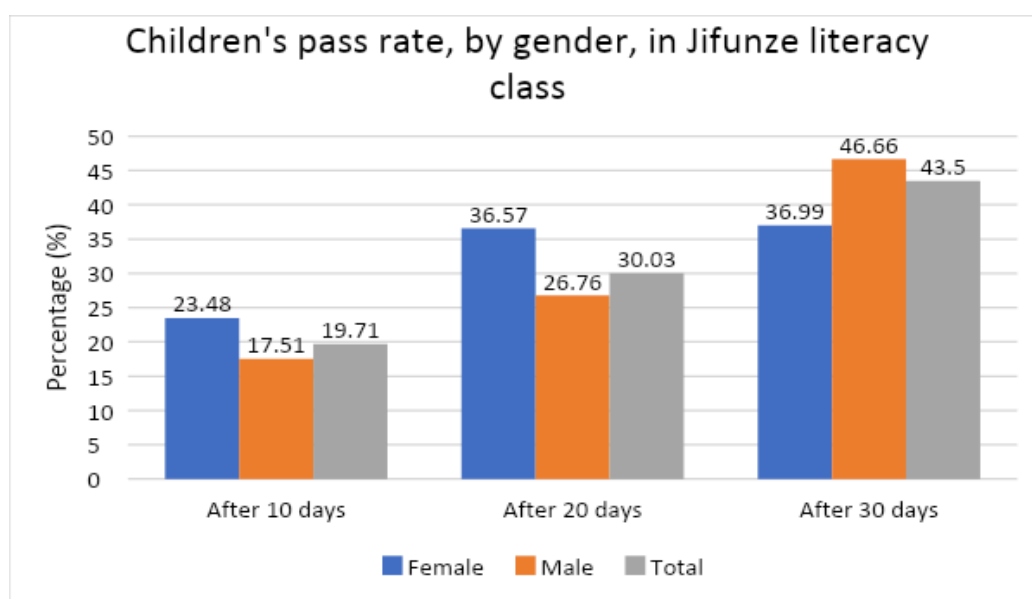
Jifunze numeracy camps

In the Jifunze numeracy camp, there were 1,535 children. 781 children were female (50.88%) and 754 children were male (49.12%). The number of girls was higher than that of boys. After 10 days of Jifunze numeracy class 291 girls (37.27% of girls) passed at the subtraction level and above, while 274 boys (36.34% of boys) passed at the subtraction level and above (see table 22). Here, the number of girls who passed was greater than that of boys, and the pass rate of girls was greater than that of boys. The total number of children who passed at the subtraction level and above is 565 children (36.8% of the children).

Table 22: Children progress after 10 days by learning levels and gender, in Jifunze numeracy.

After 10 days	Female		Male		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	3	0.38	4	0.53	7	0.46
Cannot count	0	0	3	0.4	3	0.2
Can count	3	0.38	9	1.19	12	0.78
Number recognition	30	3.84	21	2.79	51	3.32
Missing numbers	136	17.41	169	22.41	305	19.87
Addition	318	40.72	274	36.34	592	38.57
Subtraction	140	17.93	136	18.04	276	17.98
Multiplication	98	12.55	89	11.8	187	12.18
Division	53	6.79	49	6.5	102	6.64
Total	781	100	754	100	1,535	100

After 20 days of Jifunze numeracy class 332 girls (59.93% of girls) passed at the subtraction level and above, while 294 boys (53.46% of boys) passed at the subtraction level and above (see table 23). Here also, the number of girls who passed was greater than that of boys, and the pass rate of girls was greater than that of boys. The total number of children who passed at the subtraction level and above is 626 children (56.7% of the children).

Table 23: Children progress after 20 days by learning levels and gender, in Jifunze numeracy.

After 20 days	Female		Male		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	4	0.72	7	1.27	11	1
Cannot count	2	0.36	9	1.64	11	1
Can count	3	0.54	2	0.36	5	0.45
Number recognition	1	0.18	2	0.36	3	0.27
Missing numbers	67	12.09	74	13.45	141	12.77
Addition	145	26.17	162	29.45	307	27.81
Subtraction	194	35.02	169	30.73	363	32.88
Multiplication	70	12.64	58	10.55	128	11.59
Division	68	12.27	67	12.18	135	12.23
Total	554	100	550	100	1,104	100

After 30 days of Jifunze numeracy class 240 girls (78.94% of girls) passed at the subtraction level and above, while 213 boys (72.44% of boys) passed at the subtraction level and above (see table 24). Here also, the number of girls who passed was greater than that of boys, and the pass rate of girls was greater than that of boys. The total number of children who passed at the subtraction level and above is 453 children (75.75% of the children).

Table 24: Children progress after 30 days by learning levels and gender, in Jifunze numeracy.

After 30 days	Female		Male		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.33	3	1.02	4	0.67
Cannot count	1	0.33	9	3.06	10	1.67
Can count	0	0	1	0.34	1	0.17
Number recognition	0	0	0	0	0	0
Missing numbers	17	5.59	20	6.8	37	6.19
Addition	45	14.8	48	16.33	93	15.55
Subtraction	92	30.26	92	31.29	184	30.77
Multiplication	36	11.84	32	10.88	68	11.37
Division	112	36.84	89	30.27	201	33.61
Total	304	100	294	100	598	100

The total pass rate of the children increases as the number of days of Jifunze numeracy class increases from 10 to 20 to 30 days (see chart 2). The pass rate of boys also increases from 10 to 20 to 30 days, and so does the pass rate of girls.

Chart 2: Children's pass rate by gender, after each round of assessment, in Jifunze numeracy class.
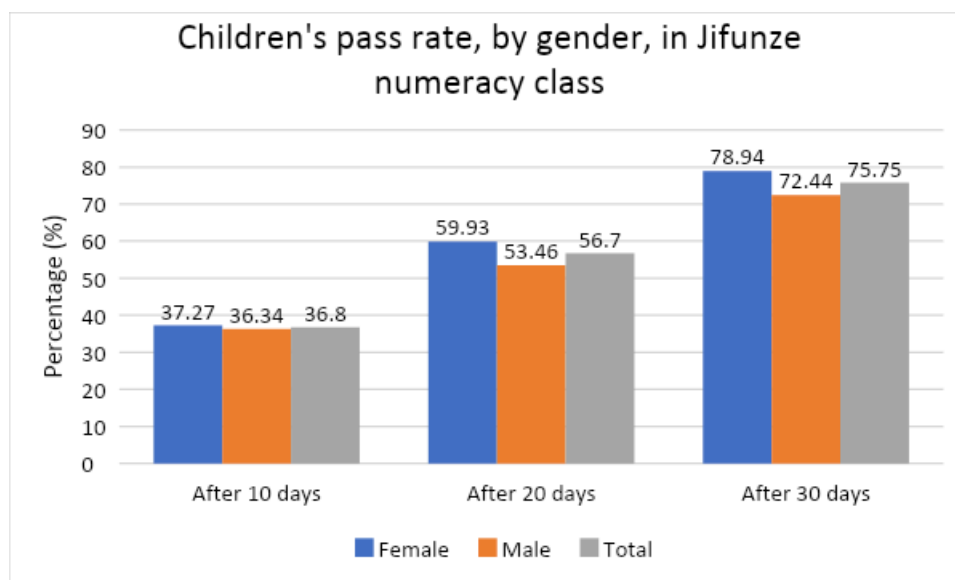
In Jifunze literacy class, the number of students who attended after 10 days was 622 children (99.68%), after 20 days it was 399 children (99.01%), and after 30 days it was 219 children (98.21%) (See table 25). Thus the children attendance rate in each learning phase was very high.

Table 25: Children attendance rate in each learning phase (10 days, 20 days and 30 days), in Jifunze literacy.

Assessment phase (Literacy)	After 10 days		After 20 days		After 30 days		Total	
Children attending class	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	2	0.32	2	0.50	1	0.45	5	0.40
No	0	0.00	2	0.50	3	1.35	5	0.40
Yes	622	99.68	399	99.01	219	98.21	1240	99.20
Total	624	100	403	100	223	100	1250	100

In Jifunze numeracy class, the number of students who attended after 10 days were 1,514 children (98.63%), after 20 days it was 1,085 children (98.28%), and after 30 days it was 579 children (96.82%) (see table 26). Thus the children attendance rate in each learning phase was very high.

Table 26: Children attendance rate in each learning phase (10 days, 20 days and 30 days), in Jifunze numeracy.

Assessment phase (Numeracy)	After 10 days		After 20 days		After 30 days		Total	
Children attending class	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.07	1	0.09	4	0.67	6	0.19
No	20	1.30	18	1.63	15	2.51	53	1.64
Yes	1,514	98.63	1,085	98.28	579	96.82	3,178	98.18
Total	1,535	100	1,104	100	598	100	3,237	100

In the Jifunze literacy class, the number of girls who passed at the story level and above, after 10 days of Jifunze who were in standard 3 were 18 girls (15% of the girls in that grade), those who were in standard 4 were 19 girls (27.53% of the girls in that grade), in standard 5 were 15 girls (46.88% of the girls in that grade) and in standard 6 were 2 girls (22.22% of the girls in that grade) (see table 27). Here, the pass rate increases as the grade rises from standard 3 to 4 to 5 and then it falls for standard 6.

Table 27: Girls progress by grade (after 10 days), in Jifunze literacy.

Female, 10 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	16	13.33	18	26.09	3	9.38	1	11.11	38	16.52
Syllable	23	19.17	8	11.59	3	9.38	0	0	34	14.78
Word	29	24.17	15	21.74	7	21.88	0	0	51	22.17
Paragraph	34	28.33	9	13.04	4	12.5	6	66.67	53	23.04
Story only	14	11.67	12	17.39	11	34.38	0	0	37	16.09
Story with comprehension	4	3.33	7	10.14	4	12.5	2	22.22	17	7.39
Total	120	100	69	100	32	100	9	100	230	100

In the Jifunze literacy class, the number of girls who passed at the story level and above, after 20 days of Jifunze who were in standard 3 were 20 girls (28.17% of the girls in that grade), those who were in standard 4 were 16 girls (44.45% of the girls in that grade), in standard 5 were 7 girls (43.75% of the girls in that grade) and in standard 6 were 6 girls (54.55% of the girls in that grade) (see table 28). Here, the pass rate increases as the grade rises from standard 3 to 4 and then it falls slightly for standard 5 and then it rises for standard 6.

Table 28: Girls progress by grade (after 20 days), in Jifunze literacy.

Female, 20 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	15	21.13	5	13.89	2	12.5	2	18.18	24	17.91
Syllable	7	9.86	1	2.78	1	6.25	0	0	9	6.72
Word	9	12.68	6	16.67	0	0	2	18.18	17	12.69
Paragraph	20	28.17	8	22.22	6	37.5	1	9.09	35	26.12
Story only	9	12.68	10	27.78	2	12.5	0	0	21	15.67
Story with comprehension	11	15.49	6	16.67	5	31.25	6	54.55	28	20.9
Total	71	100	36	100	16	100	11	100	134	100

In the Jifunze literacy class, the number of girls who passed at the story level and above, after 30 days of Jifunze who were in standard 3 were 14 girls (31.82% of the girls in that grade), those who were in standard 4 were 10 girls (47.62% of the girls in that grade), in standard 5 were 2 girls (40% of the girls in that grade) and in standard 6 was 1 girl (33.33% of the girls in that grade) (see table 29). Here, the pass rate increases as the grade rises from standard 3 to 4 and then it falls for standard 5 and then it falls again for standard 6.

Table 29: Girls progress by grade (after 30 days), in Jifunze literacy.

Female, 30 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Cannot read	5	11.36	6	28.57	3	60	1	33.33	15	20.55
Syllable	8	18.18	0	0	0	0	0	0	8	10.96
Word	1	2.27	4	19.05	0	0	1	33.33	6	8.22
Paragraph	16	36.36	1	4.76	0	0	0	0	17	23.29
Story only	1	2.27	4	19.05	0	0	0	0	5	6.85
Story with comprehension	13	29.55	6	28.57	2	40	1	33.33	22	30.14
Total	44	100	21	100	5	100	3	100	73	100

In the Jifunze literacy class, the number of boys who passed at the story level and above, after 10 days of Jifunze who were in standard 3 were 32 boys (15.31% of the boys in that grade), those who were in standard 4 were 16 boys (15.09% of the boys in that grade), in standard 5 were 14 boys (22.95% of the boys in that grade) and in standard 6 were 7 boys (38.89% of the boys in that grade) (see table 30). Here, the pass rate slightly decreases as the grade rises from standard 3 to 4, and then it rises for standard 5 and then it rises again for standard 6.

Table 30: Boys progress by grade (after 10 days), in Jifunze literacy.

Male, 10 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.48	1	0.94	0	0	0	0	2	0.51
Cannot read	45	21.53	21	19.81	5	8.2	3	16.67	74	18.78
Syllable	44	21.05	18	16.98	6	9.84	0	0	68	17.26
Word	44	21.05	21	19.81	17	27.87	6	33.33	88	22.34
Paragraph	43	20.57	29	27.36	19	31.15	2	11.11	93	23.6
Story only	15	7.18	15	14.15	13	21.31	4	22.22	47	11.93
Story with comprehension	17	8.13	1	0.94	1	1.64	3	16.67	22	5.58
Total	209	100	106	100	61	100	18	100	394	100

In the Jifunze literacy class, the number of boys who passed at the story level and above, after 20 days of Jifunze who were in standard 3 were 18 boys (16.51% of the boys in that grade), those who were in standard 4 were 30 boys (36.58% of the boys in that grade), in standard 5 were 14 boys (28% of the boys in that grade) and in standard 6 were 10 boys (35.71% of the boys in that grade) (see table 31). Here, the pass rate increases as the grade rises from standard 3 to 4 and then it falls for standard 5 and then it rises for standard 6.

Table 31: Boys progress by grade (after 20 days), in Jifunze literacy.

Male, 20 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.92	1	1.22	0	0	0	0	2	0.74
Cannot read	22	20.18	10	12.2	10	20	7	25	49	18.22
Syllable	11	10.09	3	3.66	3	6	0	0	17	6.32
Word	23	21.1	16	19.51	7	14	1	3.57	47	17.47
Paragraph	34	31.19	22	26.83	16	32	10	35.71	82	30.48
Story only	3	2.75	16	19.51	9	18	2	7.14	30	11.15
Story with comprehension	15	13.76	14	17.07	5	10	8	28.57	42	15.61
Total	109	100	82	100	50	100	28	100	269	100

In the Jifunze literacy class, the number of boys who passed at the story level and above, after 30 days of Jifunze who were in standard 3 were 23 boys (32.85% of the boys in that grade), those who were in standard 4 were 22 boys (62.86% of the boys in that grade), in standard 5 were 18 boys (54.54% of the boys in that grade) and in standard 6 were 7 boys (58.33% of the boys in that grade) (see table 32). Here, the pass rate increases as the grade rises from standard 3 to 4 and then it falls for standard 5 and then it rises for standard 6.

Table 32: Boys progress by grade (after 30 days), in Jifunze literacy.

Male, 30 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	1.43	0	0	0	0	0	0	1	0.67
Cannot read	10	14.29	4	11.43	4	12.12	4	33.33	22	14.67
Syllable	14	20	1	2.86	3	9.09	0	0	18	12
Word	3	4.29	0	0	1	3.03	0	0	4	2.67
Paragraph	19	27.14	8	22.86	7	21.21	1	8.33	35	23.33
Story only	4	5.71	4	11.43	5	15.15	4	33.33	17	11.33
Story with comprehension	19	27.14	18	51.43	13	39.39	3	25	53	35.33
Total	70	100	35	100	33	100	12	100	150	100

In the Jifunze numeracy class, the number of girls who passed at the subtraction level and above, after 10 days of Jifunze who were in standard 3 were 72 girls (20.46% of the girls in that grade), those who were in standard 4 were 74 girls (36.63% of the girls in that grade), in standard 5 were 99 girls (60.36% of the girls in that grade) and in standard 6 were 46 girls (73.01% of the girls in that grade) (see table 33). Here, the pass rate increases as the grade rises from standard 3 to 4 to 5 to 6.

Table 33: Girls progress by grade (after 10 days), in Jifunze numeracy.

Female, 10 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	2	0.57	0	0	1	0.61	0	0	3	0.38
Cannot count	0	0	0	0	0	0	0	0	0	0
Can count	3	0.85	0	0	0	0	0	0	3	0.38
Number recognition	25	7.1	4	1.98	1	0.61	0	0	30	3.84
Missing numbers	95	26.99	27	13.37	10	6.1	4	6.35	136	17.41
Addition	155	44.03	97	48.02	53	32.32	13	20.63	318	40.72
Subtraction	68	19.32	36	17.82	22	13.41	14	22.22	140	17.93
Multiplication	0	0	38	18.81	46	28.05	14	22.22	98	12.55
Division	4	1.14	0	0	31	18.9	18	28.57	53	6.79
Total	352	100	202	100	164	100	63	100	781	100

In the Jifunze numeracy class, the number of girls who passed at the subtraction level and above, after 20 days of Jifunze who were in standard 3 were 104   girls (40.78% of the girls in that grade), those who were in standard 4 were 102 girls (68.46% of the girls in that grade), in standard 5 were 87 girls (82.07% of the girls in that grade) and in standard 6 were 39 girls (88.64% of the girls in that grade) (see table 34). Here also, the pass rate increases as the grade rises from standard 3 to 4 to 5 to 6.

Table 34: Girls progress by grade (after 20 days), in Jifunze numeracy.

Female, 20 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	3	1.18	1	0.67	0	0	0	0	4	0.72
Cannot count	1	0.39	0	0	0	0	1	2.27	2	0.36
Can count	2	0.78	0	0	1	0.94	0	0	3	0.54
Number recognition	0	0	1	0.67	0	0	0	0	1	0.18
Missing numbers	54	21.18	8	5.37	4	3.77	1	2.27	67	12.09
Addition	91	35.69	37	24.83	14	13.21	3	6.82	145	26.17
Subtraction	95	37.25	55	36.91	33	31.13	11	25	194	35.02
Multiplication	5	1.96	42	28.19	19	17.92	4	9.09	70	12.64
Division	4	1.57	5	3.36	35	33.02	24	54.55	68	12.27
Total	255	100	149	100	106	100	44	100	554	100

In the Jifunze numeracy class, the number of girls who passed at the subtraction level and above, after 30 days of Jifunze who were in standard 3 were 92 girls (65.25% of the girls in that grade), those who were in standard 4 were 87 girls (88.77% of the girls in that grade), in standard 5 were 50 girls (94.34% of the girls in that grade) and in standard 6 were 11 girls (91.67% of the girls in that grade) (see table 35). Here, the pass rate increases as the grade rises from standard 3 to 4 to 5, and then it falls a little for standard 6.

Table 35: Girls progress by grade (after 30 days), in Jifunze numeracy.

Female, 30 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.71	0	0	0	0	0	0	1	0.33
Cannot count	0	0	1	1.02	0	0	0	0	1	0.33
Missing numbers	14	9.93	2	2.04	1	1.89	0	0	17	5.59
Addition	34	24.11	8	8.16	2	3.77	1	8.33	45	14.8
Subtraction	72	51.06	11	11.22	7	13.21	2	16.67	92	30.26
Multiplication	2	1.42	32	32.65	2	3.77	0	0	36	11.84
Division	18	12.77	44	44.9	41	77.36	9	75	112	36.84
Total	141	100	98	100	53	100	12	100	304	100

In the Jifunze numeracy class, the number of boys who passed at the subtraction level and above, after 10 days of Jifunze who were in standard 3 were 71 boys (21.78% of the boys in that grade), those who were in standard 4 were 78 boys (36.11% of the boys in that grade), in standard 5 were 90 boys (62.07% of the boys in that grade) and in standard 6 were 35 boys (52.24% of the boys in that grade) (see table 36). Here, the pass rate increases as the grade rises from standard 3 to 4 to 5, and then it falls for standard 6.

Table 36: Boys progress by grade (after 10 days), in Jifunze numeracy.

Male, 10 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	3	0.92	1	0.46	0	0	0	0	4	0.53
Cannot count	3	0.92	0	0	0	0	0	0	3	0.4
Can count	7	2.15	2	0.93	0	0	0	0	9	1.19
Number recognition	14	4.29	6	2.78	1	0.69	0	0	21	2.79
Missing numbers	111	34.05	36	16.67	15	10.34	7	10.45	169	22.41
Addition	117	35.89	93	43.06	39	26.9	25	37.31	274	36.34
Subtraction	65	19.94	42	19.44	24	16.55	5	7.46	136	18.04
Multiplication	1	0.31	34	15.74	35	24.14	19	28.36	89	11.8
Division	5	1.53	2	0.93	31	21.38	11	16.42	49	6.5
Total	326	100	216	100	145	100	67	100	754	100

In the Jifunze numeracy class, the number of boys who passed at the subtraction level and above, after 20 days of Jifunze who were in standard 3 were 91 boys (35.54% of the boys in that grade), those who were in standard 4 were 106 boys (63.48% of the boys in that grade), in standard 5 were 69 boys (78.42% of the boys in that grade) and in standard 6 were 28 boys (71.79% of the boys in that grade) (see table 37). Here also, the pass rate increases as the grade rises from standard 3 to 4 to 5, and then it falls for standard 6.

Table 37: Boys progress by grade (after 20 days), in Jifunze numeracy.

Male, 20 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	4	1.56	2	1.2	1	1.14	0	0	7	1.27
Cannot count	5	1.95	2	1.2	1	1.14	1	2.56	9	1.64
Can count	1	0.39	1	0.6	0	0	0	0	2	0.36
Number recognition	2	0.78	0	0	0	0	0	0	2	0.36
Missing numbers	52	20.31	13	7.78	4	4.55	5	12.82	74	13.45
Addition	101	39.45	43	25.75	13	14.77	5	12.82	162	29.45
Subtraction	80	31.25	57	34.13	26	29.55	6	15.38	169	30.73
Multiplication	6	2.34	37	22.16	12	13.64	3	7.69	58	10.55
Division	5	1.95	12	7.19	31	35.23	19	48.72	67	12.18
Total	256	100	167	100	88	100	39	100	550	100

In the Jifunze numeracy class, the number of boys who passed at the subtraction level and above, after 30 days of Jifunze who were in standard 3 were 87 boys (64.45% of the boys in that grade), those who were in standard 4 were 79 boys (78.21% of the boys in that grade), in standard 5 were 39 boys (84.78% of the boys in that grade) and in standard 6 were 8 boys (66.67% of the boys in that grade) (see table 38). Here also, the pass rate increases as the grade rises from standard 3 to 4 to 5, and then it falls for standard 6.

Table 38: Boys progress by grade (after 30 days), in Jifunze numeracy.

Male, 30 days	Standard 3		Standard 4		Standard 5		Standard 6		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	1	0.74	1	0.99	1	2.17	0	0	3	1.02
Cannot count	1	0.74	4	3.96	2	4.35	2	16.67	9	3.06
Can count	0	0	0	0	0	0	1	8.33	1	0.34
Missing numbers	12	8.89	7	6.93	0	0	1	8.33	20	6.8
Addition	34	25.19	10	9.9	4	8.7	0	0	48	16.33
Subtraction	75	55.56	12	11.88	2	4.35	3	25	92	31.29
Multiplication	1	0.74	25	24.75	6	13.04	0	0	32	10.88
Division	11	8.15	42	41.58	31	67.39	5	41.67	89	30.27
Total	135	100	101	100	46	100	12	100	294	100

In the Jifunze literacy class, the number of children who passed at the story level and above, after 10 days is 123 children (19.71% of the children); after 20 days is 121 children (30.03% of the children); after 30 days is 97 children (43.5% of the children) (see table 39). The pass rate of the children increases as the number of days of Jifunze literacy class increases from 10 to 20 to 30 days.

Table 39: Children performance in Jifunze literacy (after 10 days, 20 days and 30 days).

Assessment phase	After 10 days		After 20 days		After 30 days		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	2	0.32	2	0.5	1	0.45	5	0.4
Cannot read	112	17.95	73	18.11	37	16.59	222	17.76
Syllable	102	16.35	26	6.45	26	11.66	154	12.32
Word	139	22.28	64	15.88	10	4.48	213	17.04
Paragraph	146	23.4	117	29.03	52	23.32	315	25.2
Story only	84	13.46	51	12.66	22	9.87	157	12.56
Story with comprehension	39	6.25	70	17.37	75	33.63	184	14.72
Total	624	100	403	100	223	100	1,250	100

In the Jifunze numeracy class, the number of children who passed at the subtraction level and above, after 10 days is 565 children (36.8% of the children); after 20 days is 626 children (56.7% of the children); after 30 days is 453 c h i l d r e n (75.75% of the children) (see table 40). The pass rate of the children increases as the number of days of Jifunze numeracy class increases from 10 to 20 to 30 days.

Table 40: Children performance in Jifunze numeracy (after 10 days, 20 days and 30 days).

Assessment phase	After 10 days		After 20 days		After 30 days		Total	
Learning level	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Missing	7	0.46	11	1	4	0.67	22	0.68
Cannot count	3	0.2	11	1	10	1.67	24	0.74
Can count	12	0.78	5	0.45	1	0.17	18	0.56
Number recognition	51	3.32	3	0.27	0	0	54	1.67
Missing numbers	305	19.87	141	12.77	37	6.19	483	14.92
Addition	592	38.57	307	27.81	93	15.55	992	30.65
Subtraction	276	17.98	363	32.88	184	30.77	823	25.42
Multiplication	187	12.18	128	11.59	68	11.37	383	11.83
Division	102	6.64	135	12.23	201	33.61	438	13.53
Total	1,535	100	1,104	100	598	100	3,237	100

Overall performance of Jifunze implementation

The children's pass rate in the Jifunze numeracy class is greater than the children's pass rate in the Jifunze literacy class, in each round of Jifunze class assessment (see chart 3). The total pass rate in Jifunze numeracy class was 50.78%, while in Jifunze literacy class it was 27.28%.

Chart 3: *Average pass rate in Jifunze literacy and numeracy (after 10 days, 20 days and 30 days).*
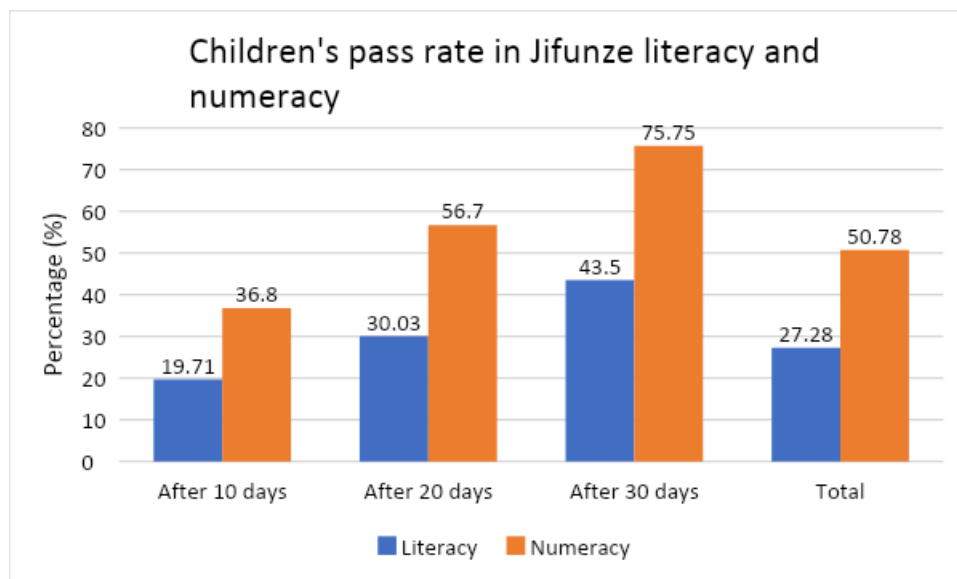
DAOs, WEOs and teachers played a very vital role in supporting the implementation of Jifunze initiative. Parents were very happy to receive instant feedback after their children were assessed at the Jifunze baseline assessment. Some parents liaised with teachers on how to help their under achieving children to catch up at school. Some parents encouraged their children to learn at home so that they can catch up. Few parents even utilized Ubongo Kids learning videos so as to teach their children at home. Parents have said that they want their children to succeed academically. Children also played a role in helping their underachieving classmates. They helped each other in Jifunze class rooms and sometimes in normal class rooms as well. This helped the children who are left behind to catch up.

NGOs and donors also play a role in supporting children that are left behind. They provide textbooks, they provide desks, they train teachers, they improve school infrastructure, and they improve school sanitation. They provide school funding sometimes directly to schools, and sometimes indirectly to the government. These activities help all children including under achieving children. In some of the areas of the districts where Jifunze operates there were big donor projects by Tusome Pamoja (USAID), EQUIP-T (DFID/FCDO) and Plan International.

Qualitative findings from partners who implemented Jifunze (Head teachers, DAOs, WEO and trainers)

Head teachers, teachers, DEOs, DAOs, WEOs, parents and Children had a very positive experience of Jifunze and wanted Jifunze to be continuous and to spread to other areas of the country. The DAOs, WEOs, head teachers and teachers wanted Jifunze techniques to be integrated into the government curriculum, especially the participatory nature, the child friendly nature, the learning activities, and the teaching aids of Jifunze. This means that the prospects for expanding Jifunze in Tanzania are very good, as Jifunze has been positively received by the district level education officials and by the head teachers and teachers, and also by the parents and Children.

CONCLUSION

Jifunze enables children to master the basic skills of reading, writing and arithmetic. Thus Jifunze directly improves the learning outcomes of children in primary schools, especially for those children enrolled from standard 3 to standard 6. By doing so Jifunze also increases the pass rates of Children who take the national standard four exams, as well as the pass rates of Children who take the national standard seven exams. This also increases the pupil transmission rate from primary school to secondary school.

Thus Jifunze fits in very well with many aspects of the education policy of the Tanzanian government. It also fits in well with the SDG 4 on education. TaRL has also been warmly received in other countries like India and Ghana. And in both countries TaRL has been somehow incorporated into the government education policy. There is a possibility for TaRL to be expanded in Tanzania whether within the government education system or outside the government education system (via NGOs like Uwezo Tanzania). There is also great possibility for some aspects of TaRL to be integrated within the government primary education curriculum.

In the future, TaRL research can focus on how to implement TaRL in a much better way in Tanzania e.g. how to make TaRL more effective in teaching children, and also how to expand the geographical scope of TaRL to other areas in Tanzania.

REFERENCES

Banerjee, A. V., Cole, S., Duflo, E., & Linden, L. (2007). Remedying education: Evidence from two randomized experiments in India. Quarterly Journal of Economics 122 (3), 1235–1264.

Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukerji, S., Shotland, M., and Walton, M. (2017). From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application. The Journal of Economic Perspectives, 31(4):73-102.

Banerji, Rukmini, Madhav Chavan, and Usha Rane. 2004. "Learning to Read." India Seminar, April. http://www.indiaseminar.com/2004/536/536%20rukmini%20banerji%20%26%20et%20al.htm.

Beg, S., Fitzpatrick, A., Luca, A., Comba, R., Atimone, H., Gyamfi, B. K., Jumpah, J., and Tsinigo, E. (2018). Strengthening Teachers Accountability to Reach all Students (STARS). World Bank SIEF: Milestone 2: Baseline Report.

Duflo, E., Dupas, P., & Kremer, M. R. (2011). Peer effects, teacher incentives, and the impact of tracking: evidence from a randomized evaluation in Kenya. American Economic Review 101 (5), 1739–1774.

Duflo, Annie, Jessica Kiessel, and Adrienne Lucas (2020). External Validity: Four Models to Increase Student Learning. Working Paper.

Muralidharan, Karthik, Abhijeet Singh and Alejandro J. Ganimian. 2019. "Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India." American Economic Review 109(4): 1426-60.

United Nations (2015). Transforming Our World: The 2030 Agenda fo

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