

Additional file 3. Quantitative analyses for school process evaluation**Table 1. Teachers' assessments of the lessons at the end of the term**

Question	Responses (N=85)				
	Missing	Very unimportant	Unimportant	Important	Very important
How important do you think fair comparisons of educational interventions are?	6 (7.1%)	5 (5.9%)	0 (0%)	19 (22%)	55 (65%)
How much did you like teaching the lessons?	Missing 1 (1.2%)	Not at all 0 (0%)	Did not like 1 (1.2%)	Liked 32 (38%)	Lived very much 51 (60%)
How important is what the children learned from the lessons?	Missing 1 (1.2%)	Unimportant 0 (0%)	Little importance 0 (0%)	Important 18 (21%)	Very important 66 (78%)
How easy or difficult was it for the children in your class to understand the lessons?	Missing 1 (1.2%)	Very difficult 0 (0%)	Difficult 9 (11%)	Easy 71 (84%)	Very easy 4 (4.7%)
How much do you think the children learned from the lessons?	Missing 1 (1.2%)	Very little 0 (0%)	Little 4 (4.7%)	Much 55 (65%)	Very much 25 (29%)
How much do you think you learned from the lessons?	Missing 1 (1.2%)	Very little 0 (0%)	Little 1 (1.2%)	Much 18 (21%)	Very much 65 (76%)

Table 2. Teachers' assessments of the lessons at the end of the term - continued

Statement	Missing	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The training that I received on how to teach the lessons was necessary for me to be able to teach the lessons well	1 (1.2%)	0 (0%)	1 (1.2%)	1 (1.2%)	34 (40%)	48 (56%)
The training that I received on how to teach the lessons was	2 (2.4%)	0 (0%)	10 (12%)	5 (5.9%)	45 (53%)	23 (27%)
I understood the content of the lessons well	1 (1.2%)	0 (0%)	0 (0%)	4 (4.7%)	42 (49%)	38 (45%)
I am confident about my ability to teach the lessons to the children	1 (1.2%)	0 (0%)	0 (0%)	3 (3.5%)	28 (33%)	53 (62%)
The teacher's guide was useful in conducting the lessons	1 (1.2%)	0 (0%)	0 (0%)	0 (0%)	25 (29%)	59 (69%)
The instructions for how to teach the lessons fit my teaching style well	1 (1.2%)	0 (0%)	4 (4.7%)	4 (4.7%)	54 (64%)	22 (26%)
The lesson activities helped children understand the content better	1 (1.2%)	0 (0%)	0 (0%)	4 (4.7%)	40 (47%)	40 (47%)
I had to adapt the instructions to fit my teaching style	2 (2.4%)	0 (0%)	2 (2.4%)	6 (7.1%)	56 (66%)	19 (22%)
I liked teaching something new	1 (1.2%)	1 (1.2%)	1 (1.2%)	2 (2.4%)	36 (42%)	44 (52%)
I think it is important to teach children to think critically	1 (1.2%)	0 (0%)	0 (0%)	1 (1.2%)	16 (19%)	67 (79%)
I do not like being challenged by children in my class	3 (3.5%)	20 (24%)	26 (31%)	4 (4.7%)	15 (18%)	17 (20%)
I like the content of the lessons	1 (1.2%)	0 (0%)	2 (2.4%)	1 (1.2%)	50 (59%)	31 (36%)
I liked the way the teaching materials and lessons were organised	2 (2.4%)	0 (0%)	1 (1.2%)	4 (4.7%)	51 (60%)	27 (32%)

Table 3. Correlations (and p-values) between time spent preparing or class time and teachers' assessments of whether that was too little or too much time

Lesson	Preparation	p-value	Class	p-value
1	0.2274786	0.07	0.5644887	<0.0001
2	0.1978938	0.12	0.1508329	0.22
3	0.1278681	0.31	0.2499880	0.04
4	-0.0066538	0.95	0.1039663	0.36
5	0.0569024	0.64	0.2783984	0.02
6	0.0238236	0.85	0.2370305	0.05
7	0.0819400	0.52	0.0137939	0.91
8	0.0880126	0.49	0.1437234	0.24
9	0.1700126	0.23	0.2679309	0.04

All correlations are Spearman (non-parametric) coefficients.

Table 4. Distributions of teachers' assessments of suitability of materials, summarized by 25th, 50th (median), and 75th percentiles

Material	Lesson	25%	50%	75%
Children's Book	1	4	4	6
	2	4	5	6
	3	4	4	6
	4	4	4	6
	5	4	4	6
	6	4	4	6
	7	4	4	6
	8	4	4	6
	9	4	4.5	6
Teacher's Guide	1	4	5	6
	2	4	5	6
	3	4	4	6
	4	4	5	6
	5	4	5	6
	6	4	4	6
	7	4	4	6
	8	4	5	6
	9	4	4	6
Activity	1	4	4	6
	2	4	4	6
	3	4	4	6
	4	4	4	6
	5	4	5	5
	6	4	4	5
	7	4	4	6
	8	4	4	5
	9	4	4	6
Exercises	1	4	4	5
	2	4	5	6
	3	4	4	5
	4	4	4	5
	5	4	4	6
	6	4	4	5
	7	4	4	6
	8	4	4	5
	9	4	4	6

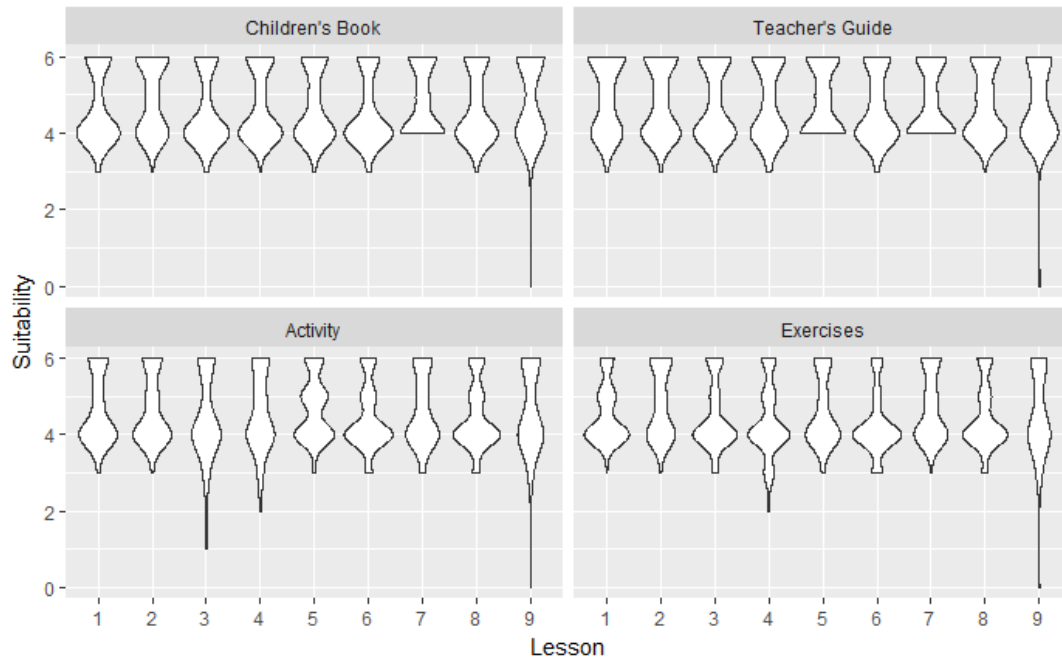
Table 5. Distributions of teachers' assessments of children's success, summarized by 25th, 50th (median), and 75th percentiles

Question	Lesson	25 th	50 th	75 th
Appropriateness of objectives	1	4	6	6
	2	4	6	6
	3	4	6	6
	4	4	6	6
	5	5	6	6
	6	4	5	6
	7	4	6	6
	8	5	6	6
	9	4	6	6
Difficulty for children	1	4	4	4
	2	4	4	5
	3	3	4	5
	4	4	4	5
	5	4	4	5
	6	4	4	4
	7	4	4	5
	8	4	4	5
	9	4	4	6
Difficulty for teacher	1	4	4	6
	2	4	4	6
	3	4	4	5
	4	4	4	6
	5	4	4	5.5
	6	4	4	5
	7	4	4	6
	8	4	4	5
	9	4	5	6
Comfort teaching the lesson	1	4	4.5	6
	2	4	4	6
	3	4	4	6
	4	4	4	6
	5	4	4	6
	6	4	4	5
	7	4	4	6
	8	4	4	6
	9	4	5	6
Too much or little time preparing	1	3	3	4
	2	3	3	3
	3	3	3	3
	4	3	3	3
	5	3	3	3
	6	3	3	3
	7	3	3	3
	8	3	3	3
	9	3	3	3
Too much or little time teaching	1	3	3	4
	2	3	3	3
	3	3	3	3
	4	3	3	3
	5	3	3	3
	6	3	3	3
	7	3	3	3
	8	3	3	3
	9	3	3	3
Interestingness for children	1	4	5	6
	2	4	5.5	6
	3	4	4	6
	4	4	4	6
	5	4	4	6
	6	4	4	6
	7	4	4	6
	8	4	4	6
	9	4	4	6

Table 6. Distributions of preparation and class time used (in minutes), summarized by 25th, 50th (median), and 75th percentiles

Question	Lesson	25%	50%	75%
Preparation time	1	15.00	20	35.00
	2	18.75	20	30.00
	3	20.00	30	40.00
	4	15.00	20	30.00
	5	20.00	20	40.00
	6	20.00	20	35.00
	7	18.00	20	30.00
	8	10.00	20	30.00
	9	15.00	20	30.00
Class time	1	60.00	80	90.00
	2	60.00	80	86.25
	3	60.00	79	90.00
	4	60.00	80	80.00
	5	60.00	80	83.75
	6	70.00	80	90.00
	7	60.00	80	81.25
	8	60.00	80	80.00
	9	60.00	80	86.25

Figure 1. Teachers' assessments of material suitability by lesson



1. Rate the suitability of the *children's book* for teaching and learning this lesson for your class

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
Very bad		Bad		Good		Very good

2. Rate the suitability of the *teacher's guide* for teaching and learning this lesson to your class

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
Very bad		Bad		Good		Very good

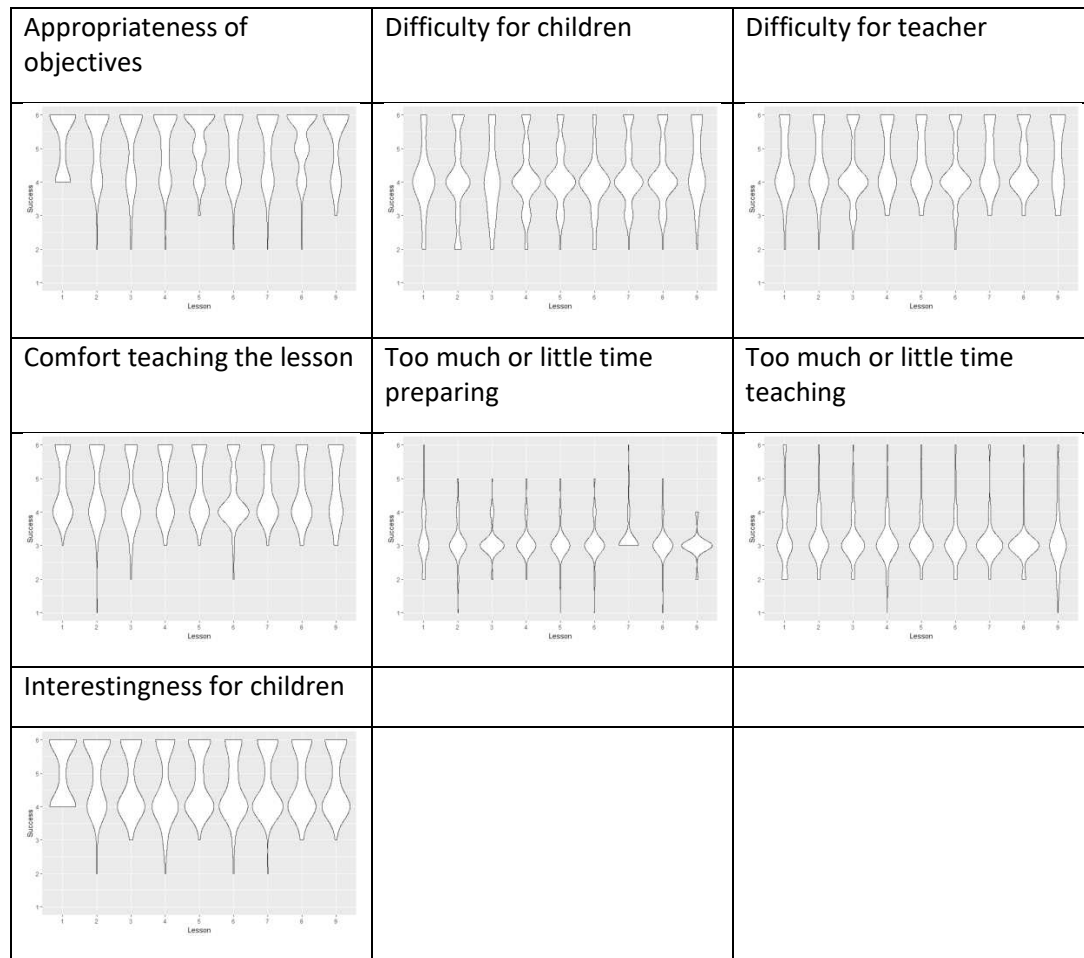
3. Rate the suitability of the *activity* for teaching and learning this lesson for your class

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
Very bad		Bad		Good		Very good

4. Rate the suitability of the *exercises* for teaching and learning this lesson for your class

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
Very bad		Bad		Good		Very good

Figure 2. Children’s success in achieving lesson objectives



2. Were the objectives of this lesson appropriate for your class?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Inappropriate</i>		<i>Somewhat inappropriate</i>		<i>Somewhat appropriate</i>		<i>Appropriate</i>

3. How difficult was this lesson for the children?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Very difficult</i>		<i>Difficult</i>		<i>Easy</i>		<i>Very easy</i>

4. How difficult was this lesson for you?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Very difficult</i>		<i>Difficult</i>		<i>Easy</i>		<i>Very easy</i>

5. How comfortable were you teaching this lesson?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Very uncomfortable</i>		<i>Uncomfortable</i>		<i>Comfortable</i>		<i>Very comfortable</i>

7. Was that too little or too much time?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Much too little</i>		<i>Too little</i>		<i>About right</i>		<i>Too much</i>

9. Was that too little or too much time?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Much too little</i>		<i>Too little</i>		<i>About right</i>		<i>Too much</i>

10. How interesting was this lesson for the children?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6
<i>Very uninteresting</i>		<i>Uninteresting</i>		<i>Interesting</i>		<i>Very interesting</i>

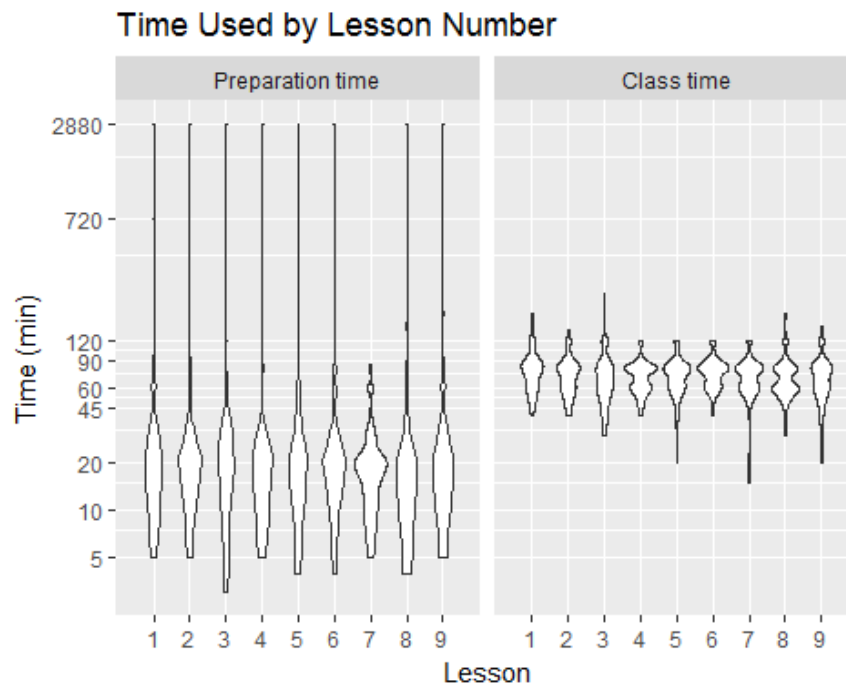
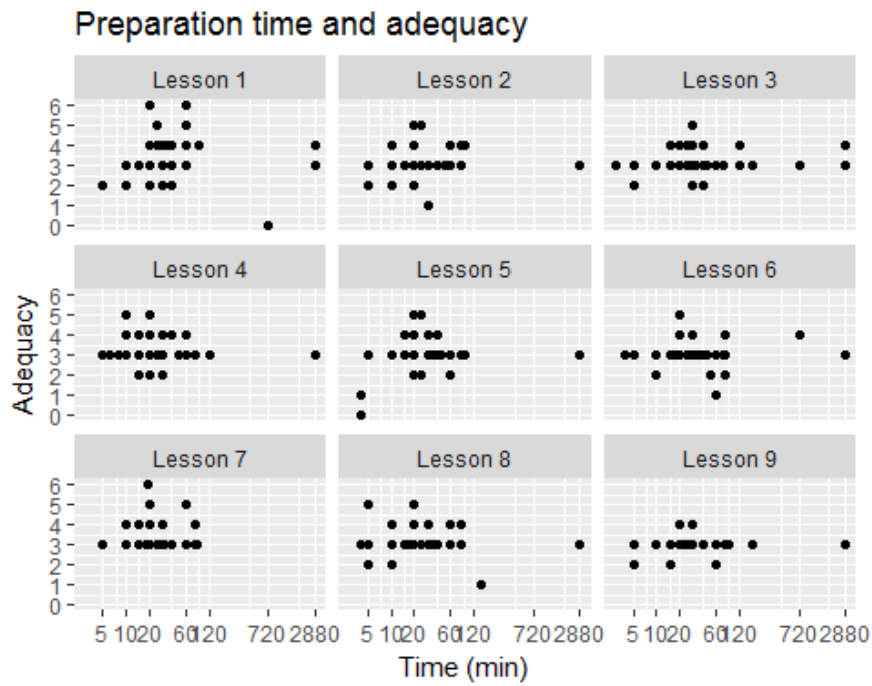
Figure 3. Time used by lesson

Figure 4. Preparation time in relation to teachers' assessments of whether that was too little or too much time for each lesson



Was that too little or too much time?

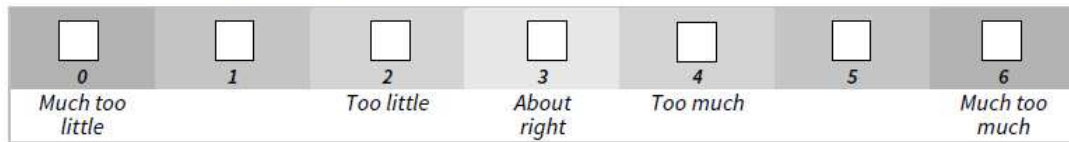
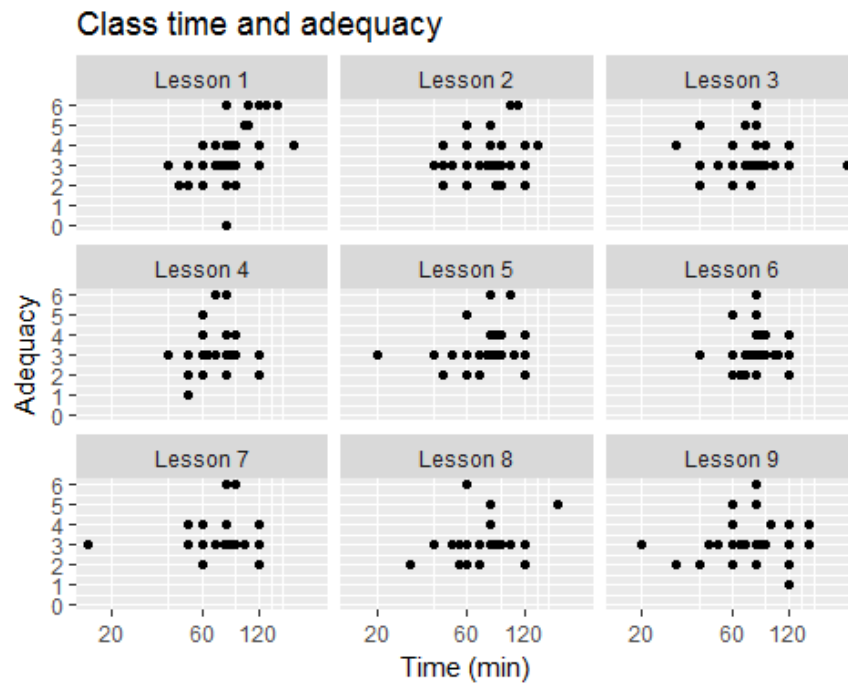


Figure 5. Class time in relation to teachers' assessments of whether that was too little or too much time for each lesson



Was that too little or too much time?

