



Evaluation pilot **Bilingual Primary Education**

*Baseline assessment
School year 2014/15*

English Summary

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Evaluation pilot bilingual primary education

(Tweetalig Primair Onderwijs)

Baseline assessment school year 2014/15

Summary

This report describes the initial findings of the study into the bilingual primary education pilot (BPE). The study aims to answer the questions posed about the form that BPE has taken at schools and the effects of BPE on the language skills of the pupils in both English and Dutch.

After the baseline assessment in group 1 (kindergarten; age 4-5), the study will have two further opportunities to measure pupil progress, in group 3 (grade 1; age 6-7) (2017) and group 5 (grade 3; age 8-9) (2019). The first report is mainly descriptive in nature but the future reports will focus on the development of language skills amongst the pupils and the effects BPE has on this.

Next to the twelve BPE schools in the study, there are twelve EEFL schools (early English as a foreign language) and nine schools where there is no extra foreign language teaching. These nine schools follow the requirements currently set by the government (English from group 7 / grade 5) and are known in the study as LEFL schools (late English as a foreign language). The baseline assessment has gathered information about the initial levels of pupils, parents, teachers and lessons. Group 1 (kindergarten) pupils were tested on their receptive vocabulary and understanding of grammar in English; for Dutch, results from national standardized diagnostic tests (Cito-LVOS) were used. In addition, parents completed a questionnaire. Teachers were tested in English and completed a self-assessment to establish their levels of skill in the language; they were also interviewed and their English lessons were observed.

Design of BPE

In the twelve BPE schools taking part in the study, between 25 and 50% of the lesson time is delivered in English (on Mean: 36%). In EEFL schools, by comparison, English is used on Mean for 5% of the time. Half of the BPE schools use the *one teacher, one language* approach (OTOL, where one teacher speaks English, the other Dutch); four use the *one situation, one language* approach (OSOL, where the teacher speaks both languages but they are offered at different times); two schools offer both languages during the whole week in a mixed approach (the sandwich method).

Background and attitudes of pupils

In general, there are few BPE pupils who speak English at home, though there are some exceptions where the numbers in the school are higher. There are also some schools where the home language of many of the pupils is neither Dutch nor English, but a different one.

The parents of BPE pupils are in general highly educated, with considerable variation between schools. At both BPE and EEFL schools, all of the interested parties - pupils, parents and teachers – expressed positive attitudes towards English.

Language development of pupils

On Mean, BPE pupils achieved better results in receptive English vocabulary and grammar tests than EEFL pupils. EEFL pupils, in turn, achieved better results than LEFL pupils. All three groups have comparative results for Dutch and maths, though there is considerable variation between individual pupils and schools. The results from BPE and (to a lesser extent) EEFL pupils in English show a significant correlation with the amount of English they receive at school and the extent to which they engage in English-language activities at home.

Language skills, attitudes and pedagogical characteristics of teachers

There is considerable variation in the age, educational background and experience of the BPE teachers. There are a number of teachers who are English native speakers, some consider themselves near-native speakers and others describe themselves as non-native speakers. According to a self-assessment and vocabulary test, all teachers achieved a good to excellent level of proficiency in English (B2-C2). All of the teachers fully support the concept of BPE. The structure and design in each BPE school may differ, but are well-considered and appropriate to the vision of the school. The majority of the teachers try to only speak English during the English curriculum, resorting to Dutch if they consider the situation to be unsafe for the child, either physically or on social-emotional grounds. The teachers try to reward the children as much as possible for using English and give mainly implicit feedback when they do so. Teachers have differing opinions about whether or not children would be better off learning English from a native speaker.

Despite all of the differing backgrounds and opinions, the observed lessons proved to be comparable: interactive, playful and linked to a theme. Differences in the lessons regarding methodology, input, interaction and feedback appear to be the result of the diverse teaching and learning activities that were used during the observations.

It is interesting that even though the BPE pilot was still in its early stages when data collection took place, the BPE pupils appear to have already achieved better results in English than their EEFL and LEFL peers. To establish whether this is indeed the case, in the next stage of the FOTO project a difference-in-differences analysis will be conducted. In this way, we will be able to consider the differences between pupils and schools and also take into account the differences in (language) outcomes at the baseline assessment. As a result, in future reports we will be able to establish in what respect the differences in English language skills are the result of bilingual education.

Table 2.3 – Planning and implementation measures: who, what and when

	Form	2015 group 1	2017 group 3	2019 group 5
<i>Pupils</i>				
Receptive vocabulary English (PPVT-4)	Test	BEL*	BEL	BEL
Receptive grammar English (TROG-2)	Test	BEL	BEL	BEL
Productive vocabulary English(EVT-2)	Test		BE	BE
Productive grammarEnglish (TEGI)	Test		BE	BE
Narrative task English(Frog Story)	Test		BE	BE
Reading skills English	Test			BE
Writing skills	Test			BE
Language for preschoolers	Test	BEL		
Maths for preschoolers	Test	BEL		
Spelling	Test		BEL	BEL
Vocabulary	Test		BEL	BEL
Reading comprehension	Test		BEL	BEL
Phonic skills	Test		BEL	BEL
Maths	Test		BEL	BEL
Attitude	Questionnaire		BE	BE
<i>Parents and guardians</i>				
Background characteristics	Questionnaire	BEL		
Attitude, exposure	Questionnaire	BEL	BEL	BEL
<i>Teachers</i>				
Training, experience and attitudes to English	Questionnaire	B	B	B
Self-assessment in English	Questionnaire	B	B	B
Receptive vocabulary in English	Test	B	B	B
Observations	Observation	B	B	B
<i>BPE coordinators</i>				
Organisation and design	Questionnaire	B	B	B

*B=BPE-schools; E=EEFL-schools; L=LEFL-schools

Table 3.1 – Actual sample of schools and pupils, according to school type

	School type			total
	BPE	EEFL	LEFL	
n schools	12	12	9	33
n pupils	330	356	322	1008
range pupils per school (min.–max.)	6-58	8-52	25-46	
Average number of pupils per school	28	30	36	

Table 3.3 – Number of minutes of English at school per week, absolute and relative to total lesson time, according to school type (Mean and %)

	School type				
	BPE		EEFL		
	p/w minutes	p/w % of 1500min	p/w minutes	p/w % of 1500min	
Total	532	36%	Totaal	75	5%
BPE_1	600	40%	EEFL_1	75	5%
BPE_2	750	50%	EEFL_2	55	4%
BPE_3	660	44%	EEFL_3	60	4%
BPE_4	630	42%	EEFL_4	60	4%
BPE_5	600	40%	EEFL_5	180	12%
BPE_6	420	28%	EEFL_6	60	4%
BPE_7	600	40%	EEFL_7	120	8%
BPE_8	420	28%	EEFL_8	60	4%
BPE_9	375	25%	EEFL_9	60	4%
BPE_10	480	32%	EEFL_10	60	4%
BPE_11	600	30%	EEFL_11	90	6%
BPE_12	450	35%	EEFL_12	30	2%

Table 3.4 – Testscores English, according to school type (Mean)

		School type			
		BPE	EEFL	LEFL	total
N		330	356	322	1008
PPVT	Offered	58.2	41.7	31.0	43.7
	Incorrect	24.8	21.2	17.5	21.2
	Correct (sd)	33.4 (17.3)	20.5 (12.0)	13.4 (10.3)	22.5 (15.7)
		BPE	EEFL	LEFL	total
N		328	354	320	1002
TROG	Offered	30.8	22.5	21.2	24.8
	Incorrect	12.7	13.2	13.9	13.3
	Correct (sd)	18.1 (11.6)	9.3 (5.9)	7.3 (4.2)	11.5 (9.1)

Table 3.5 – Test scores Language for Preschoolers (TvK) and Maths for Preschoolers (RvK), according to school type (scores per skill; Means (sd) n)

		School type			
		BPE	EEFL	LEFL	totaal
TvK	M-version	55.8 (11.0) 214	53.0 (11.8) 252	54.5 (9.5) 170	54.4 (11.0) 636
	E-version	52.2 (19.8) 29	44.0 (0.0) 1	57.3 (10.9) 42	55.0 (15.2) 72
RvK	M-version	72.4 (12.2) 213	67.0 (15.8) 251	71.6 (10.9) 212	70.1 (13.5) 676
	E-version	70.1 (15.9) 29	57.0 (0.0) 1	106.0 (0.0) 1	70.8 (16.8) 31

Table 3.6 – Test scores vocabulary and grammar in English (PPVT and TROG), Dutch language and maths per school

		PPVT		TROG		Language score		Maths score	
type	school	Mean.	N	Mean.	N	Mean .	N	Mean.	N
BPE		33.4 (17.3)	330	18.1 (11.6)	328	55.8 (11.0)	214	72.4 (12.2)	213
	1	44	22	29	22	51	22	70	22
	2	34	29	19	29	58	22	71	23
	3	55	6	35	6	47	6	63	6
	4	33	29	17	29	62	19	77	18
	5	32	46	19	46	-	0	-	0
	6	32	35	16	35	54	33	72	33
	7	42	26	25	26	56	26	72	26
	8	22	10	12	8	57	5	74	5
	9	29	58	12	58	59	55	74	54
	10	39	20	20	20	45	10	66	10
	11	35	20	20	20	53	16	75	16
	12	26	29	15	29	-	0	-	0
EEFL		20.5 (12.0)	356	9.3 (5.9)	354	53.0 (11.8)	252	67.0 (15.8)	251
	1	17	26	7	26	55	20	70	20
	2	15	22	8	22	51	18	72	18
	3	20	46	8	46	-	0	-	0
	4	21	28	10	28	63	20	76	19
	5	23	41	11	40	54	33	67	33
	6	22	25	10	25	37	21	32	21
	7	23	8	12	8	50	8	65	8
	8	15	8	6	8	60	8	85	8
	9	23	35	10	35	55	33	72	33
	10	20	52	10	52	50	44	66	44
	11	26	26	11	25	56	22	67	22
	12	18	39	8	39	57	25	73	25
LEFL		13.4 (10.3)	322	7.3 (4.2)	320	54.5 (9.5)	170	71.6 (10.9)	212
	1	16	39	8	38	-	0	-	0
	2	14	40	7	39	56	27	71	29
	3	14	25	8	25	55	23	70	23
	4	13	43	6	43	55	43	73	43
	5	12	27	7	27	61	18	80	18
	6	13	25	8	25	49	20	67	20
	7	15	40	8	40	50	18	68	18
	8	11	37	7	37	54	21	69	21
	9	13	46	7	46	-	0	73	40

Table 3.7 – Correlations between scores TROG and PPVT tests and scores for Language and Maths

Total (N = 632)	PPVT	TROG	Language score	Maths score
PPVT (n items correct)	1	,746**	,132*	,136*
TROG (n items correct)		1	,122*	,146**
Language score (skills score)			1	,635**
Maths score (skills score)				1
BPE (N = 212)	PPVT	TROG	Language score	Maths score
PPVT (n items correct)	1	,727**	,091	,109
TROG (n items correct)		1	,054	,073
Language score (skills score)			1	,556**
Maths score (skills score)				1
EEFL (N=251)	PPVT	TROG	Language score	Maths score
PPVT (n items correct)	1	,583**	,177*	,157 ¹
TROG (n items correct)		1	,202*	,204*
Language score (skills score)			1	,695**
Maths score (skills score)				1
LEFL (N=169)	PPVT	TROG	Language score	Maths score
PPVT (n items correct)	1	,493**	,058	,069
TROG (n items correct)		1	,041	,088
Language score (skills score)			1	,597**
Maths score (skills score)				1

** p < 0.01, * p < .01, ¹ p < .05

Table 3.10 – Number of minutes per week that children come into contact with English at home in six different situations, according to school type and sorted by school

			School type					
BPE			EEFL			LEFL		
school	Mean (sd)	min-max	school	Mean (sd)	min-max	school	Mean (sd)	min-max
	167 (229)	0 - 1800		112 (159)	0 - 1415		110 (191)	0 - 1420
1	179 (191)	0 - 590	1	95 (122)	0 - 420	1	117 (206)	0 - 102
2	186 (274)	0 - 1300	2	155 (136)	0 - 440	2	95 (169)	0 - 860
3	365 (243)	0 - 590	3	108 (113)	0 - 315	3	86 (97)	0 - 340
4	122 (133)	0 - 470	4	88 (83)	0 - 270	4	99 (147)	0 - 840
5	145 (165)	0 - 660	5	90 (95)	0 - 335	5	116 (157)	0 - 600
6	110 (132)	0 - 420	6	90 (120)	0 - 420	6	149 (249)	0 - 100
7	146 (154)	0 - 585	7	243 (359)	0 - 810	7	125 (190)	0 - 790
8	145 (158)	0 - 410	8	80 (82)	0 - 190	8	67 (84)	0 - 330
9	154 (332)	0 - 1800	9	140 (191)	0 - 720	9	158 (313)	0 - 1420
10	213 (269)	0 - 1000	10	87 (87)	0 - 380			
11	177 (223)	15 - 690	11	145 (159)	0 - 660			
12	228 (247)	0 - 680	12	117 (262)	0 - 1415			

Tabel 3.11 – Percentage of parents indicating that the child mainly hears or speaks English in five situations, according to school type and sorted by school

		Hears					speaks				
type	school	mother	father	Siblings	Other family members	peers	mother	father	Siblings	Other family members	Peers
BPE		5,9	6,1	3,6	3,5	1,5	4,3	3,9	4,7	1,3	1,5
	1	5,0	22,2		6,7		5,0	11,1	15,4	6,7	
	2		3,8								
	3	60,0	16,7		50,0	20,0	50,0	20,0	25,0	20,0	20,0
	4	4,3		6,3	7,7		4,3				
	5		5,9					6,3			
	6										
	7	8,7	4,3	10,0		5,3	4,3	4,3	10,5		5,0
	8										
	9		3,3								
	10	20,0	6,7	9,1			7,7	6,7	9,1		
	11	11,8	13,3	14,3		6,7	12,5	13,3	14,3		6,3
	12				14,3						

		Hears					speaks				
type	school	mother	father	Siblings	Other family members	peers	mother	father	Siblings	Other family members	Peers
EEFL		1,4	1,4	,5	2,2	,9	,9	1,4	,5	2,1	,5
	1		9,1			9,1					
	2		8,3					8,3			
	3	4,3			15,8						
	4	6,3									
	5										
	6										
	7	20,0			16,7					28,6	
	8										
	9			9,1							
	10		3,6				3,3	3,6		3,6	
	11					4,8					
	12						3,4	3,6	4,2	5,6	3,8
LEFL		,4	,4		1,1	,4	,4	,4	,5		
	1				5,3						
	2					2,9					
	3										
	4										
	5										
	6										
	7	5,3	5,0				4,8	5,0	5,9		
	8										
	9				4,2						

Table 3.12 –Percentage of parents who indicate that their child comes into contact with English speakers, other than relatives, in four different situations, and where the child also speaks English (according to school type and sorted by school)

type	school	home	self	During holidays abroad	self	Visits to English- speaking relatives and friends	self	Other situations	self
BPE		29,6%	73,0%	54,3%	64,0%	34,6%	77,5%	23,3%	76,2%
	1	42,1%	87,5%	66,7%	66,7%	52,6%	90,0%	17,6%	100,0%
	2	14,8%	50,0%	39,3%	66,7%	23,1%	33,3%	4,5%	100,0%
	3	66,7%	100,0%	100,0%	83,3%	100,0%	83,3%	33,3%	100,0%
	4	39,1%	77,8%	59,1%	41,7%	22,7%	80,0%	23,5%	50,0%
	5	29,4%	75,0%	56,3%	77,8%	41,2%	100,0%	46,7%	87,5%
	6	35,7%	40,0%	54,5%	57,1%	30,8%	33,3%	27,3%	100,0%
	7	43,5%	60,0%	69,6%	68,8%	43,5%	80,0%	52,4%	90,9%
	8	0,0%	0,0%	42,9%	33,3%	14,3%	0,0%	0,0%	0,0%
	9	11,1%	50,0%	42,9%	46,7%	20,0%	50,0%	12,9%	25,0%
	10	60,0%	77,8%	71,4%	80,0%	66,7%	90,0%	25,0%	66,7%
	11	18,8%	100,0%	56,3%	62,5%	31,3%	100,0%	23,1%	33,3%
	12	23,1%	100,0%	30,8%	100,0%	23,1%	100,0%	16,7%	100,0%
EEFL		11,1%	65,2%	37,0%	34,9%	14,7%	51,6%	6,4%	66,7%
	1	0,0%	0,0%	54,5%	33,3%	18,2%	50,0%	0,0%	0,0%
	2	16,7%	50,0%	41,7%	40,0%	41,7%	66,7%	18,2%	0,0%
	3	26,1%	40,0%	50,0%	8,3%	9,1%	0,0%	0,0%	0,0%
	4	11,8%	50,0%	47,1%	12,5%	11,8%	0,0%	0,0%	0,0%
	5	14,3%	75,0%	44,4%	33,3%	14,8%	25,0%	3,7%	0,0%
	6	0,0%	0,0%	25,0%	16,7%	12,5%	33,3%	4,2%	100,0%
	7	62,5%	100,0%	62,5%	100,0%	62,5%	100,0%	25,0%	100,0%
	8	0,0%	0,0%	25,0%	0,0%	12,5%	0,0%	0,0%	0,0%
	9	5,3%	0,0%	42,1%	28,6%	16,7%	33,3%	5,9%	100,0%
	10	15,6%	80,0%	46,9%	64,3%	18,8%	100,0%	10,0%	100,0%
	11	4,3%	100,0%	22,7%	60,0%	4,3%	100,0%	14,3%	100,0%
	12	0,0%	0,0%	10,0%	33,3%	0,0%	0,0%	3,4%	0,0%

type	school	home	self	During holidays abroad	self	Visits to English- speaking relatives and friends	self	Other situations	self
LEFL		6,5%	23,5%	42,9%	11,0%	11,5%	16,7%	8,7%	28,6%
	1	13,3%	25,0%	56,7%	7,1%	22,2%	0,0%	3,7%	50,0%
	2	8,6%	0,0%	40,0%	6,7%	20,6%	0,0%	17,6%	0,0%
	3	0,0%	0,0%	33,3%	20,0%	5,6%	0,0%	0,0%	0,0%
	4	8,1%	0,0%	45,9%	0,0%	8,1%	0,0%	5,7%	0,0%
	5	9,1%	0,0%	36,4%	0,0%	0,0%	0,0%	9,5%	0,0%
	6	0,0%	0,0%	56,3%	25,0%	5,9%	0,0%	0,0%	0,0%
	7	9,5%	66,7%	38,1%	33,3%	19,0%	60,0%	12,5%	33,3%
	8	2,9%	0,0%	47,1%	6,7%	5,9%	0,0%	9,1%	66,7%
	9	3,0%	100,0%	31,3%	22,2%	12,1%	50,0%	12,1%	66,7%

Figure 3.1 – Highest level of education achieved by parents, according to school type and sorted by school (in %)

Tpo = BPE; vvto = EEFL; eibo = LEFL

blue = primary; red = lower secondary; green = upper secondary; orange = tertiary education

Highest level of education achieved by mother **Highest level of education achieved by father**

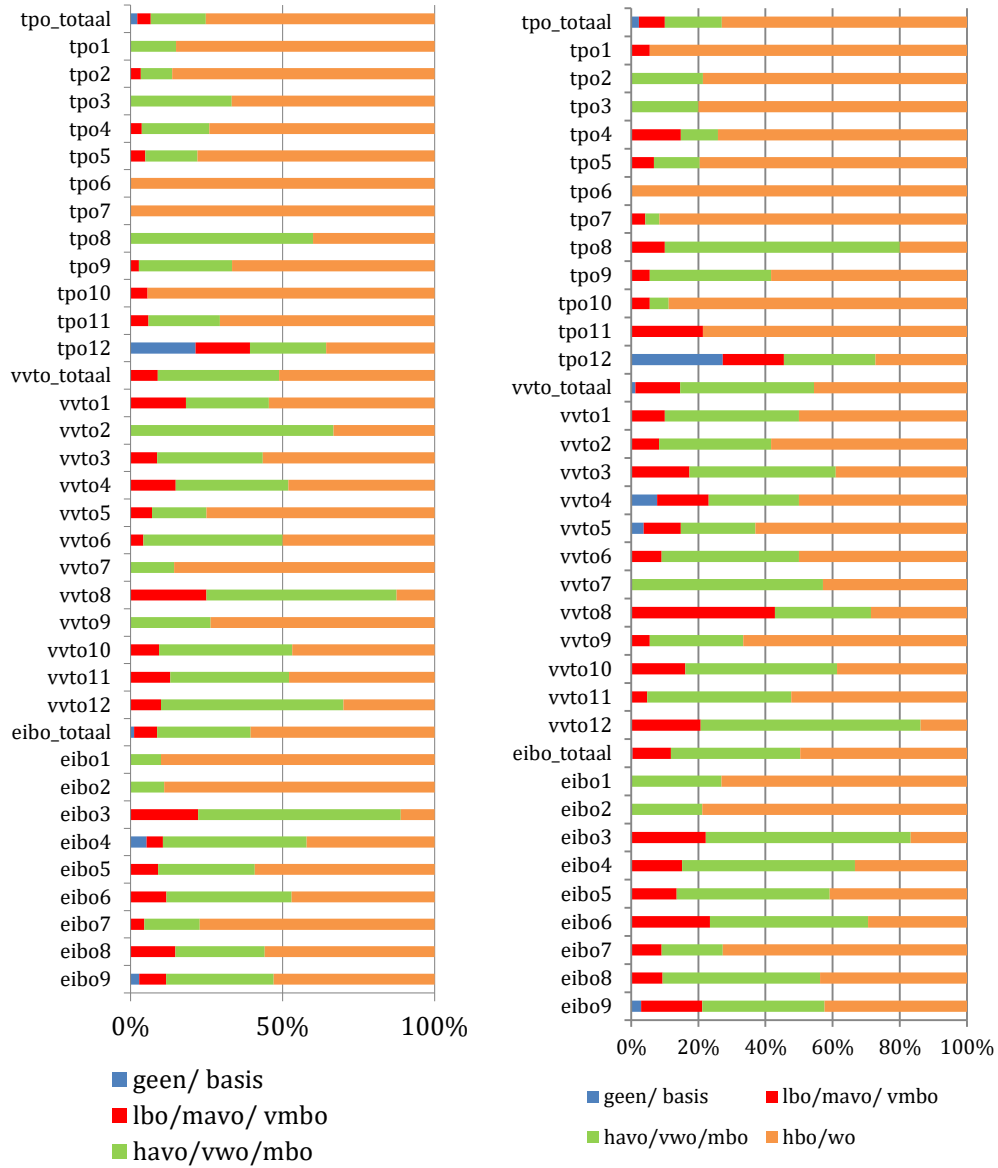
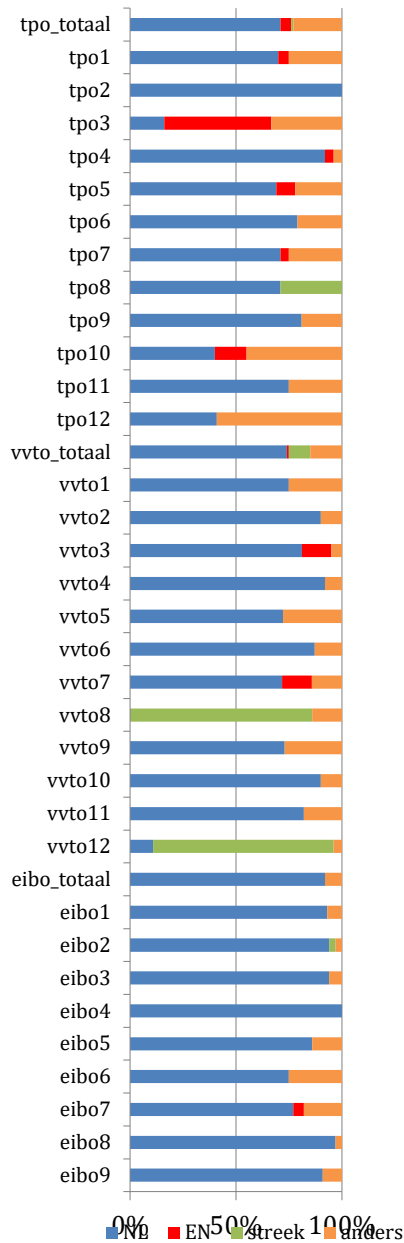


Figure 3.2 – Parents' first language and languages used at home, according to school type and sorted by school.

Tpo = BPE; vvto = EEFL; eibo = LEFL

blue = Dutch; red = English; green = regional language; orange = other language

What is the mother's first language?



What is the father's first language?

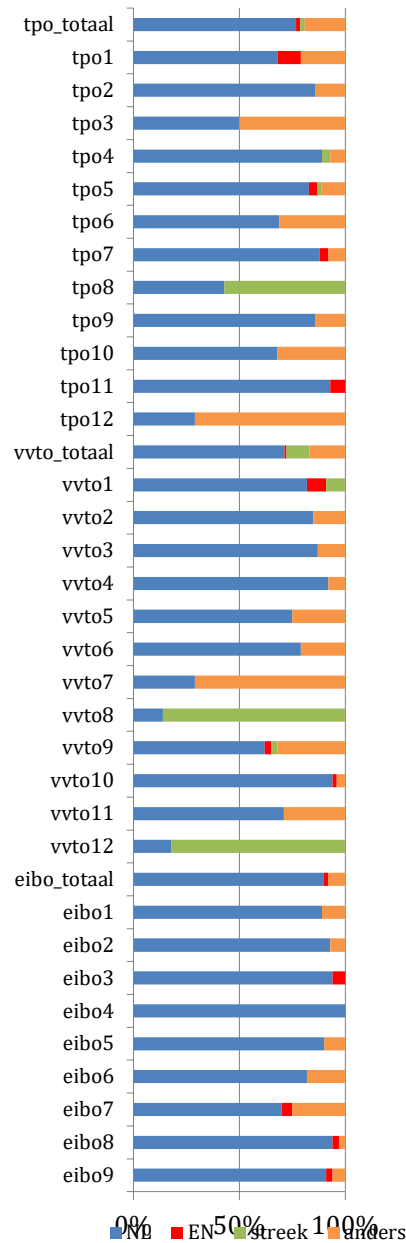


Table 3.18 – Language proficiency of parents in Dutch, according to school type and sorted by school

			School type					
BPE			EEFL			LEFL		
school	mother	father	school	mother	father	school	mother	father
	18,4	18,4		18,6	18,6		18,9	18,8
1	18,8	18,7	1	16,5	18,0	1	19,1	18,7
2	19,6	18,7	2	18,2	17,5	2	19,7	19,7
3	14,5	15,0	3	18,4	18,5	3	17,9	17,9
4	18,8	18,6	4	18,5	18,1	4	19,0	19,0
5	18,4	19,1	5	18,8	19,3	5	19,0	19,0
6	19,4	18,9	6	18,6	19,0	6	19,4	19,0
7	18,6	19,0	7	16,7	14,7	7	19,0	18,8
8	17,1	16,9	8	17,8	18,3	8	18,8	19,0
9	18,9	19,0	9	18,9	19,4	9	18,1	18,0
10	15,3	17,1	10	19,5	19,2			
11	18,7	18,5	11	18,6	18,2			
12	17,2	16,3	12	19,0	18,9			

Table 3.19 – Language proficiency of parents in English, according to school type and sorted by school

			School type					
BPE			EEFL			LEFL		
school	mother	father	school	mother	father	school	mother	father
	16,0	16,5		15,2	15,7		14,9	15,5
1	15,7	18,1	1	12,9	16,0	1	15,1	15,9
2	16,3	16,6	2	14,6	15,8	2	16,2	17,2
3	17,2	16,8	3	15,9	15,3	3	13,2	13,4
4	16,3	16,0	4	14,4	15,1	4	14,5	15,7
5	16,5	17,3	5	15,5	16,1	5	14,6	13,8
6	15,7	17,3	6	14,5	15,8	6	14,9	15,5
7	17,6	17,6	7	15,9	14,4	7	16,1	16,4
8	14,7	14,0	8	15,5	15,4	8	14,4	15,6
9	14,9	15,7	9	15,9	17,1	9	14,6	15,0
10	17,0	17,5	10	16,4	16,4			
11	16,8	17,2	11	15,5	15,2			
12	13,1	12,3	12	14,1	14,9			

Table 3.20 – Correlations between background variable and scores for TROG and PPVT tests

	School type						Total	
	BPE		EEFL		LEFL			
	PPVT	TROG	PPVT	TROG	PPVT	TROG	PPVT	TROG
gender (0 = girl) (table 3.2)	-,045 N = 330	-,087 N = 328	-,034 N = 356	-,006 N = 354	-,009 322	-,043 320	-,006 N = 1008	-,023 N =1002
English lessons p/w in minutes (table 3.3)	,178* N = 330	,272** N = 328	,120* N = 356	,111* N = 354			,426** N = 686	,487** N = 682
English language activities at home (table3.10)	,268** N = 216	,248** N = 214	,168* N = 233	,230** N = 231	,262** N = 250	,255** N = 249	,268** N = 699	,267** N = 694
Involvement of the child (table 3.13)	,029 N = 219	,006 N = 217	,094 N = 235	,096 N = 233			,051 N = 454	,031 N = 450

* $p \leq .05$

** $p \leq .001$

3.6 Teacher variables

The BPE schools in tables 3.21 – 3.30 were randomly reorganized and newly anonymized, now from BPE_A to BPE_L. There is no direct relationship between schools with numerical codes (BPE_1-12) and schools with alphabetical codes (BPE_A-L). This measure was taken to protect the anonymity of the participating BPE teachers. Of course it is possible to link the BPE student data (BPE_1-12) to the BPE teacher data (BPE_A-L) in subsequent analyses.

Table 3.21. – Summary of assessment of BPE teachers

	Questionnaire	Skills test	Lesson observation	Interview
Background and experience	x			x
Attitude toward BPE	x			x
Proficiency level in English		x	*)	
Self-assessment of proficiency in English	x			
Teaching methodology			x	x

*) It was not possible to assess the English language proficiency of BPE teachers above B2 level during a lesson observation.

Table 3.22 – General information about BPE teachers’ teaching experience, in years

BPE-school	Teaching experience in Primary Education	Teaching experience of English in Primary Education
BPE_A	10	1
BPE_B	1	1
BPE_C	2	1
BPE_D	14	8
BPE_E	3	3
BPE_F	11	1
BPE_G	7	4
BPE_H	40	40
BPE_I	14	5
BPE_J	2	2
BPE_K	2	2
BPE_L	6	6

*rounded off in years at the time of the assessment, February-March 2015

Table 3.23 – Components of the school portraits

Component	Definition
<i>Design BPE</i>	Description of days or half-days on which pupils are taught in English and Dutch. It also describes the teachers involved in the group and how this is realized.
<i>Form BPE</i>	Description of the English teaching activities, teaching methods used and learning resources available.
<i>Stimulation of English language</i>	Description of the manner in which the teacher stimulates the use of English by pupils. Does the teacher only speak English during English language activities? How does the teacher react to errors made by the pupils in their English? How does the teacher react to pupils' use of Dutch?
<i>Differentiation</i>	Description of how the BPE teacher adapts to the differing learning needs of pupils.
<i>Attitude BPE</i>	The most significant results from the questionnaire about teacher attitudes are included in the school portrait. These results are supplemented by statements made by the teacher during the interview stage, for example, what aspects of the English language the teacher considers to be the most important to convey to the pupils; what is going well and what can be improved; what are their needs for further training; when is the teacher satisfied with BPE and what are the characteristics of an ideal BPE teacher.

Table 3.24 – Summary of the design of BPE per school

BPEschool	OTOL	OSOL	Sandwich
BPE_A		x	
BPE_B			x
BPE_C	x		
BPE_D			x
BPE_E		x	
BPE_F	x		
BPE_G		x	
BPE_H	x		
BPE_I	x		
BPE_J	x		
BPE_K	x		
BPE_L		x	

OTOL: one teacher, one language; OSOL: one situation, one language; Sandwich: one teacher/situation, two languages

Table 3.26a –Results of lesson observations-Pedagogy

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD	
Pedagogy	1.1The teacher explains the English activities clearly.	3	3	3	3	3	4	5	2	4	2	3	4	3.25	0.83	
	1.2 The teacher explains the English activities in different ways, taking into account the learning styles of pupils.	3	2	2	3	3	4	4	2	3	2	3	4	2.92	0.76	
	1.3 The teacher uses a variety of teaching methods appropriate to the language goals and the educational needs of the pupils.	3	2	3	3	4	4	5	3	4	2	4	4	3.42	0.86	
	1.4 The teacher supports the English language with gestures, body language, objects and pictures.	3	3	3	3	3	4	4	4	4	4	3	3	4	3.42	0.49
	1.5 The teacher selects and uses a wide variety of appropriate (digital) educational materials.	3	2	2	4	4	4	4	4	2	3	2	2	4	3.00	0.91

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD
	1.6 The material used is attractive and suits the needs of the pupils in terms of language, culture and perception.	4	3	4	4	4	5	4	3	4	3	3	5	3.83	0.69
	1.7 The teacher creates a sensory-rich environment (using pictures, music, etc.) so that pupils are challenged to use the English language .	3	2	3	4	3	5	4	2	4	3	3	5	3.42	0.95
	1.8 The teacher gives the pupils the opportunity to participate in various ways (e.g. by moving actions and singing).	4	3	2	4	4	3	5	2	4	3	3	3	3.42	0.86

1 =behaviour is not observed, 5 =behaviour is observed frequently .

Table 3.26b—Results of lesson observations -Input

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD	
Input	2.1 The lesson focuses on meaning.	4	3	3	3	4	4	5	4	4	2	2	5	3.58	0.95	
	2.2 The lesson focuses on communication.	2	3	1	4	2	3	5	3	3	3	3	3	2.92	0.95	
	2.3 The teacher uses Child Directed Speech (modified pitch, speed and intonation)	4	5	3	4	4	4	5	3	4	3	4	4	3.92	0.64	
	2.4 The teacher focuses on the comprehensible presentation of basic English vocabulary.	4	3	3	4	4	5	5	4	4	2	3	5	3.83	0.90	
	2.5 The teacher creates a system of language support (by paraphrasing, using repetitive, simple but correct sentences, etc.).	3	4	3	4	3	5	4	4	4	3	3	3	5	3.67	0.75
	2.6 The teacher draws attention to aspects of form in the language	1	2	1	1	1	4	4	1	1	1	3	1	1	1.75	1.16

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD
	2.7 The teacher ensures enough repetition so that pupils have the opportunity to memorize words or structures.	3	3	3	3	3	4	5	4	4	2	4	4	3.50	0.76
	2.8 The teacher conducts the lesson almost completely in English..	4	2	5	3	5	5	5	5	5	5	5	5	4.50	0.96

1 = behaviour is not observed , 5 = behaviour is observed frequently.

Table 3.26c—Results of lesson observations - Interaction

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD
Interaction	3.1 The teacher stimulates the pupils to express themselves in English..	4	2	3	3	3	3	4	3	4	3	3	3	3.17	0.55
	3.2 The pupils are given enough time to speak in English.	3	2	3	3	2	3	5	3	3	2	3	3	2.92	0.76
	3.3 The teacher stimulates the pupils to listen to each other and ask questions.	2	2	2	3	2	4	4	2	3	2	3	4	2.75	0.83
	3.4 The teacher asks open questions.	4	3	4	4	3	5	5	3	4	4	4	5	4.00	0.71

1 =behaviour is not observed , 5 =behaviour is observed frequently .

Table 3.26d –Results of lesson observations – Feedback

		BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD
Feedback	4.1 The teacher gives implicit feedback on the English used by the pupils (e.g. recasts)	2	3	3	3	2	4	3	3	3	3	3	4	3.00	0.58
	4.2 The teacher gives explicit feedback on the English used by the pupils.	1	1	1	1	1	1	1	1	2	1	1	1	1.08	0.28
	4.3 The teacher gives the pupils positive feedback on the use of the English language.	4	4	3	4	4	3	3	2	3	3	4	3	3.33	0.62
	4.4 The feedback is focused on content..	2	3	3	3	2	3	3	3	3	3	2	3	2.75	0.43
	4.5 The feedback is focused on form.	1	1	1	2	1	4	3	1	1	2	1	3	1.75	1.01

1 =behaviour is not observed , 5 =behaviour is observed frequently .

Table 3.27 – Summary of results, attitudes of BPE teachers

	BPE_A	BPE_B	BPE_C	BPE_D	BPE_E	BPE_F	BPE_G	BPE_H	BPE_I	BPE_J	BPE_K	BPE_L	M	SD
1. I like teaching in English.	5	5	5	5	5	5	5	5	4	5	5	5	4.92	0.28
2. The pupils in my class enjoy learning English.	5	5	4	5	5	5	5	5	5	5	4	5	4.83	0.37
3. I have the pedagogic skills necessary in order to teach in bilingual primary education.	5	5	4	4	4	4	5	4	5	4	5	5	4.50	0.50
4. The pupils in my class find it difficult to have lessons in English.	2	1	2	2	1	1	4	4	4	1	2	1	2.08	1.19
5. The workload has increased since the start of bilingual primary education .	5	4	5	1	4	1	3	4	3	3	4	4	3.42	1.26
6. I fully support the decision of the school for bilingual primary education.	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
7. I find it difficult to teach in English.	2	1	1	1	2	2	1	4	2	1	1	1	1.58	0.86
8. Bilingual primary education is a reason for me to (continue to) work at this school..	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
9. . Pupils can learn English best from a native speaker	2	1	4	4	2	3	5	3	5	4	3	1	3.08	1.32

10. Bilingual primary education is good for all pupils, regardless of their background and abilities.	5	3	4	4	5	5	4	3	2	5	3	3	3.83	0.99
11. My own proficiency in English is sufficient to teach in the bilingual primary education setting. .	5	5	5	4	4	5	5	5	5	5	5	5	4.83	0.37

1 =strongly disagree, 5 =strongly agree.

Table 3.30 – Overview of assessed proficiency levels in relation to the design of BPE

BPE-school	Language background	Self assessment	Vocabulary size test	Design BPE
BPE_A	Near native	C2	C1	OSOL
BPE_B	Near native	B2/C1	C1	Sandwich
BPE_C	Near native	C2	C1	OTOL
BPE_D	Non-native	B2/C1	C1	Sandwich
BPE_E	Non-native	B1	C1	OSOL
BPE_F	Native speaker	C2	C2	OTOL
BPE_G	Native speaker	C2	C2	OSOL
BPE_H	Native speaker	C2	C2	OTOL
BPE_I	Native speaker	C2	C2	OTOL
BPE_J	Native speaker	C2	C2	OTOL
BPE_K	Near native	C2	C1	OTOL
BPE_L	Near native	C2	C2	OSOL

OTOL: one teacher, one language; OSOL: one situation, one language; Sandwich: one teacher/situation, two languages.

Conclusions and preview

In this report, we have presented an overview of the design and baseline assessment of the BPE project. Below, we will summarize the main points thus far and will give a short preview of future areas for research and assessment.

Research design

- 12 BPE-schools, 12 EEFL-schools and 9 LEFL-schools participated in the baseline assessment.
- The baseline assessment collected data from pupils, parents and teachers.

Design of Bilingual Primary Education (research question 4)

- At BPE schools, English is the language of instruction for between 25% and 50% (on average: 36%) of lesson time. At EEFL schools, English is used as the language of instruction for between 2% and 12% (on average: 5%) of lesson time.
- There is a differing approach to the manner in which the two languages are presented among the BPE schools. Half of the 12 BPE schools adopt the *one teacher, one language* approach, where two teachers are involved with a class, one of whom speaks English and the other uses Dutch. At four schools, the choice has been for *one situation, one language* where the teacher speaks both languages but in separate and distinct situations, for example at specific times of the day or the week. At the two remaining schools, both languages are presented in a mixed way throughout the week.

Background and attitudes of pupils (research questions 1a and 5)

- A parent questionnaire was completed for an average of two-thirds of the BPE and EEFL pupils
- In general, there are few BPE pupils who speak English as a home language. It is also evident, however, that at some BPE schools the proportion of pupils who have English as a home language is significantly higher. At a number of BPE schools, there is also a significant number of pupils with a home language other than English or Dutch. There are also schools with only (or mostly) Dutch families.
- On average, pupils at BPE schools come into more contact with the English language outside school than pupils at EEFL and LEFL schools. There is much variation between the different schools.
- In general, the pupils in this study have highly educated parents. At BPE schools, in particular, many parents have attended university. There are also significant differences here between the BPE schools.
- At both BPE and EEFL schools, the attitude of pupils, parents and teachers is fairly positive.

Language development of pupils (research question 1a)

- Individual pupils were tested on two skills in English, namely receptive vocabulary and receptive grammar. In addition, national standardized test data about their proficiency in Dutch and maths was also gathered.
- For receptive vocabulary in English, we see that, on average, BPE pupils outperform EEFL pupils who, in turn, do better than LEFL pupils. For receptive grammar in English, we see a similar pattern, though the difference between EEFL- and LEFL pupils is minimal.

- Regarding Dutch and maths, pupils at BPE, EEFL and LEFL schools have equal score results on average.
- For all of these results, and especially for English, there is considerable variation between the schools within the (BPE, EEFL and LEFL) groups.
- The performance of BPE and EEFL pupils in English show consistency with how much English they receive at school and also with the amount of English language activities they do at home. We are unable to say, on the basis of our baseline assessment, which of these two (or other) variables is the best predictor of performance.

Language skills, attitude and pedagogic characteristics of teachers (research questions 4 and 5)

- There are large differences between BPE teachers in terms of their age, educational background and experience. Despite these differences, we have observed many similarities regarding their positive attitudes to BPE, the manner in which they teach, and the way in which they view the language development in English of their pupils. In 5 of the 12 BPE schools, the teacher responsible for English is a native speaker.
- Based on self-assessment, the language proficiency of non-native speaking teachers is assessed at B1 (one teacher), B2 / C1 (two teachers) or C2 (four teachers) levels. Based on a vocabulary test, their language skills are estimated at an even higher level (all either C1 or C2).
- Despite all of the different backgrounds and beliefs about BPE, the observed lessons were comparable: interactive, play based and related to a specific theme. Differences between classes in terms of pedagogy, input, interaction and feedback especially seemed to be related to the diversity of learning activities that were used during the lesson observations themselves.
- On the basis of the baseline assessment, it is not yet possible to establish relationships between teacher/lesson characteristics and the language test results of the pupils. In addition, the factor of pupil / parent characteristics must also be taken into account. This will be done during the second assessment, when differences between the initial and subsequent assessments will be compared.

Further analysis

- Analyses in this report relate to a baseline assessment and are therefore only descriptive.
- It is remarkable that, despite the short duration of the BPE pilot at the time of data collection, the BPE pupils already seem to perform better in English than their EEFL- and LEFL-peers.
- To establish if this is indeed the case, in the subsequent stage of the FoTo project a difference-in-differences analysis will be conducted. In this way, we will be able to take into account the differences between schools and pupils, while also including the variations in performance (language levels) at the baseline assessment, which will enable us to establish if the differences in English language skills are a result of bilingual primary education. On the basis of the baseline assessment alone, we are unable to state this with any certainty.
- A detailed analysis of background characteristics will also be conducted. Many factors (for example, if there is an English-speaking parent at home or how much English television is watched) are related to each other, and it is yet to be established to what extent they should be analysed together or separately.

Preview

- The next assessment will take place in group 3 (spring 2017).
- In addition to receptive vocabulary, both productive vocabulary and grammar in English will be tested. It will include a narrative task, which will be conducted on a sample of both BPE and EEFL pupils . This will be tested by a small group of pupils in a pilot study this year.
- During assessment #2 regarding Dutch, more national standardized test (LOVS) data will be collected with respect to assessment #1, namely spelling, vocabulary, reading comprehension, phonics and numeracy/mathematics.
- We also hope to collect any missing information on the background characteristics of the pupils at this time.