Exploring Meaningful Access From The School Level

Kwame Akyeampong and Caine Rolleston

Messages

- Timely enrolment matters
- Inter-school differences in intake and progress are significant
- No large gender disparities
- Positive effects of attendance on progress
- Higher grade pupils frequently operating at levels consistent with lower grades

Timely enrolment

- Many children in all grades in the sample schools are considerably older than the national age expected
- Parents' reasons for not enrolling children 'on time' included lack of 'readiness' which appears to be associated with physical development
- Heights in P1 are strongly clustered despite a wide age range which may suggest parents tend to relate size with 'readiness'
- Early indications suggest that children who are relatively older make less progress in achievement terms
- Age-grade profiles differ between schools considerably

Age and Height in P1



Age and Height in P4



Correlation between age and progress in English



Correlation between age and progress in Maths



Inter-school variations in meaningful access are substantial – in terms of achievement and progress especially. Differences also appear to exist between public and private schools

Private schools made good progress in P4 English



Many pupils make relatively poor progress and function at a level consistent with a lower grade. Some appeared even to regress in English. Age and school attended have large effects on progress.

Test scores in maths overlap by grade considerably



Progress in English is improved by better attendance younger age and particular schools

	Coef.	Std. Err.	t	P> t	95% Conf.	Interval
logattendance	11.94069	3.996029	2.99	0.003	4.069418	19.81197
maths1	.4007548	.0961946	4.17	0.000	.2112733	.5902364
eng1	.6083132	.0484931	12.54	0.000	.5127926	.7038337
age	5971224	.2145705	-2.78	0.006	-1.019778	174467
school_1	4.043747	1.603151	2.52	0.012	.8859014	7.201593
school_2	4.17614	2.018317	2.07	0.040	.2005112	8.15177
school_4	4.454546	2.523554	1.77	0.079	5162862	9.425377
school_6	8.274048	2.678089	3.09	0.002	2.998816	13.54928
_lschool_10	6.393245	2.299945	2.78	0.006	1.862873	10.92362
_lschool_15	5.007082	2.057266	2.43	0.016	.9547315	9.059432
gender	411823	.8145561	-0.51	0.614	-2.016315	1.192669
_cons	13.83098	3.457866	4.00	0.000	7.019768	20.6422

Poor attendance may be linked with long travelling times to school and also with indicators of location such as distances to a water source. Better attendance is linked with better results, especially in English.

Long travel times bring lower attendance while those tutored at home attend more

	Percentage attendance		
VARIABLES	coef	tstat	
Household chores	0.005	0.32	
Work generates earnings	0.005	0.40	
Travelling to school	-0.124	-3.31***	
Attending school lessons	0.012	1.07	
Private tuition outside home	0.045	2.50**	
Homework / tuition at home	-0.027	-1.37	
leisure	-0.013	-1.23	
sleeping	0.006	0.44	
Eating bathing personal care	-0.043	-1.48	
Constant	0.840	4.97***	
Observations	222		
Adjusted R-squared	0.12		

Better attendance yields better results Seemingly more so in English

eng1	Coef.	Std. Err.	t	P> t
totatt	.1465374	.0282188	5.19	0.000
age	1.785393	.236502	7.55	0.000
gender	7340361	1.116168	-0.66	0.511
_cons	-23.37833	6.12941	-3.81	0.000

maths1		Coef.	Std. Err.	t	P> t
totatt		.061525	.0135275	4.55	0.000
age	1	.553	.1143286	4.84	0.000
gender		8652429	.535715	-1.62	0.107
_cons	1	2970024	2.955196	-0.10	0.920

Further Work Examples

- What school level factors explain variations in meaningful access by school?
- What explains differences between private and public schools?
- What influences the age-grade profile of pupils by school?
- What interventions improve timely enrolment?