

Appendix E.
Kindergarten through Grade Three Longitudinal Tables

TABLE E-1
Number of Schools, Students and Classes by Type
Longitudinal Data Base: STAR, 1985-1989*

	Sch.		Pupils		Classes					
	N	N	N	%	Small N	Regular %	Regular N	With Aide %	Total N	Total %
Data Base K - 3 Longitudinal Analysis	54	1842	91	44	51	25	65	31	207	100

*In Project STAR for 4 years, in the same class type.

TABLE E-2

Design for Total Class Analysis, Showing the Source of Variation, Error Terms and Degrees of Freedom, Longitudinal Study: STAR 1985-1989, Grades K-3

Source of Variation	Error Term			
Grade (G)	Schools by Location (S:L)			
LOCATION x GRADE (LG)	S:L			
TYPE (T)	S:L			
TYPE x GRADE (TG)	TxS:L			
LOCATION x TYPE x GRADE (LTG)	TxS:L			

	Degrees of Freedom			
	WSS	Reading	Math	Listen
Schools:Location (S:L)	52	54	54	54
Type x Schools (TxS:L)	81	89	89	89

TABLE E-3

Design for Analysis by Race, Showing Source of Variation, Error Terms and Degrees of Freedom, Longitudinal Study: STAR 1985-1989, Grades K-3

Source of Variation	Error Term			
GRADE (G)	SCHOOLSxRACExLOCATION (S:R:L)			
LOCATION x GRADE (LG)	S:R:L			
TYPE x GRADE (TG)	TxS:R:L			
RACE (R)	S:R:L			
RACE x GRADE (RG)	S:R:L			
LOCATION x RACE x GRADE (LRG)	S:R:L			
LOCATION x TYPE x GRADE (LTG)	TxS:R:L			
RACE x TYPE (RT)	TxS:R:L			
RACE x TYPE x GRADE (RTG)	TxS:R:L			
LOCATION x RACE x TYPE x GRADE (LRTG)	TxS:R:L			

	Degrees of Freedom			
	WSS	Reading	Math	Listen
Schools:Race:Location (S:R:L)	51	52	53	54
Type x Schools:Race:Location (TxS:R:L)	76	84	84	84

TABLE E-4

**Analysis of Variance Results, Expressed as Significance Levels,
Project STAR, Longitudinal Analysis (1985-1989) Showing the Total
Class Result and the Class Results by Race, Grades K-3**

	Word Study Skills	Total Read	Total Math	Total Listen
GRADE	p<.001	p<.001	p<.001	p<.001
LOC. X GRADE	N.S.	p<.001	N.S.	N.S.
TYPE X GRADE	N.S.	N.S.	N.S.	N.S.
LOC X TYPE X GRADE	N.S.	N.S.	p<.05	N.S.
RACE X GRADE	N.S.	N.S.	N.S.	N.S.
RACE X LOC. X GRADE	N.S.	N.S.	N.S.	N.S.
RACE X TYPE X GRADE	N.S.	N.S.	N.S.	N.S.
RACE X LOC. X TYPE X GRADE	p<.001	p<.06	p<.05	p<.05

TABLE E-5**Total Reading Mean Scores by Location:
STAR, 1985-1989**

	K	Gain K-G1	G1	Gain G1-G2	G2	Gain G2-G3	G3	Gain K-G3
Inner-city	435.6	68.0	503.6	68.0	571.6	39.6	611.2	175.6
Suburban	448.3	91.0	539.3	56.6	595.9	29.0	624.9	176.6
Rural	446.2	103.9	550.1	55.8	605.9	24.2	630.1	183.9
Urban	449.1	99.0	548.1	50.7	598.8	22.5	621.3	172.2

		13.5*		46.5*		34.3*		18.9*
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*Largest difference between Inner City and any other group.
