Supplemental Material S2 displays demographic characteristics of children across the four treatment arms. A likelihood ratio test for each variable was conducted to determine whether demographic variables differed significantly across the treatment arms. A significant effect of treatment arm was found for speech/language services, gender, race, ethnicity, and father's education. The significant effects likely occurred because the sample had little variation in demographic characteristics. That is, most children clustered on one or two values of a variable (e.g., white). When this small, homogeneous sample was divided into four groups, some of the less well represented values of a variable were clustered in certain treatment arms. For example, the only two participants reporting multiple races were both randomly assigned to arm 2, while two of the three African American participants were randomly assigned to arm 1. We have no hypotheses that suggest demographic characteristics would affect children's word learning outcomes, unless these characteristics led to differences in language skills. Potential differences in language test scores are addressed in Supplemental Material S3.

Supplemental Material S2. *Demographic characteristics of participants in each treatment arm.*

Demographic characteristics		Arm 1: 6x6 – 9x4 (*n* = 8)	Arm 2: 9x4 – 6x6 (*n* = 9)	Arm 3: 4x9 – 6x6 (*n* = 9)	Arm 4: 6x6 – 4x9 (*n* = 8)
Currently receiving speech/language services $\chi^2 (8, N = 34) = 16.53, p = .04$		63%	67%	44%	63%
Family history of speech/language disability $\chi^2 (12, N = 34) = 18.27, p = .11$		38%	33%	44%	25%
Gender: % male $\chi^2 (8, N = 34) = 39.18, p = .02$		50%	56%	56%	88%
Race: % White $\chi^2 (12, N = 34) = 25.76, p = .01$		75%	78%	89%	100%
Ethnicity: % Non-Hispanic $\chi^2 (12, N = 34) = 23.27, p = .03$		75%	78%	100%	100%
Parent Marital Status: % married $\chi^2 (12, N = 34) = 18.85, p = .09$		75%	44%	44%	50%
Mother's education $\chi^2 (20, N = 34) = 30.28, p = .07$	% Graduate Degree	13%	0%	0%	38%
	% College Graduates	25%	33%	22%	25%
	% Partial College	13%	33%	44%	38%
	% High School Graduates	38%	22%	22%	0%
	% Partial High School	13%	11%	11%	0%
Father's Education $\chi^2 (20, N = 34) = 34.35, p = .02$	% Graduate Degree	13%	0%	0%	0%
	% College Graduates	0%	11%	33%	13%
	% Partial College	75%	22%	11%	38%
	% High School Graduates	0%	44%	22%	13%
	% Unknown	13%	22%	33%	38%