

**Supplemental Material S1.** Codes and definitions for participants, speech-generating devices (SGDs), dependent variables, and settings/routines.

<b>Category</b>	<b>Code</b>	<b>Operational definition</b>
Age group	Preschool	Ages birth to 5 years
	Elementary	Ages 6–10 years
	Secondary	Ages 11–21 years
Diagnosis	Autism spectrum disorder (ASD)	Specified diagnosis of autism, ASD, pervasive developmental disorder, or Asperger syndrome
	Cerebral palsy	Specified diagnosis of cerebral palsy
	Intellectual disability	Specified intellectual disability or mental retardation (primary or secondary)
	Developmental delay	Specified primary diagnosis of developmental, language, or cognitive delay
	Down syndrome	Specified diagnosis of Down syndrome
	Multiple disability	Specified primary diagnosis of multiple disability
	Speech disorder	Specified primary diagnosis of a speech disorder (e.g., apraxia)
Other	Specified diagnoses of other developmental disabilities not listed above (e.g., Prader–Willi syndrome)	
SGD type	Simple	SGD with 1–12 symbols per page (including switch device)
	Intermediate	SGD with more than 12 symbols, but no navigation described
	Advanced	SGD with more than 12 symbols per page, and navigation described
	Not stated	Unclear information about SGD (may have mentioned device name but not specifically number of messages)
SGD prior use	No prior use	Stated/implied participants had minimal to no prior SGD use
	Prior use	Stated/implied participants had previously used an SGD
	Not stated	Prior use not clear or not stated
Routine	Book reading	Routines based around reading
	Classroom routines	Routines typical of classroom (e.g., circle, group work)
	Conversation	Routines in which the primary activity was a conversation
	Leisure/recreation	Non–school leisure activities such as sports, arts, shopping, movies
	Meal	Routine in which main activity surrounded eating/drinking
	Play	Routines specified as play, social games, board games
	School specials	School special routines such as art, music, library
Vocation	Routine involving work/career skills	
Setting	School	School or daycare center
	Home	Primary place of residence (including residential facilities)
	Clinic	University clinic or laboratory
	Community	Community contexts (stores, restaurants, etc.)