SUPPLEMENTAL MATERIAL

Table S1

Description of AAC training characteristics

Study	Training content	Instructional strategies	Instructor	Training Method	Duration of training	Instruction material	Data collected on users of AAC
1. Ampuero & Robertson, 2022	Method/ strategy: mand training.	Praise, corrective feedback, description; role-play; rehearsal; allow for questions.	Researcher	One-on-one, in person	10-min sessions	Typed protocol; datasheet	No
2. Andzik & Christensen, 2021	Intervention: comm package	Rationale; description; demonstration; role-play; supportive feedback; allow questions	Teacher	One-on-one, in person	Average session of 18 min	Packet of information	Yes (did not inform design dependent decisions)
3. Binger et al., 2010	Method/ strategy: interaction strategy	Instructed on Interaction strategy: Read Ask Answer brief verbal Prompt (RAAP)	Researcher	One-on-one, in person	Average 2.4 hr over a mean of 24 days	Set of storybooks	Yes
4. Bingham et al., 2007	Intervention: prompt AAC use.	Summaries; discussions; role-plays; modelling; examples of AAC systems; self-evaluation by watching baseline videos	Researcher	One-on-one, in person;	9 hr broken into 4 sections (2; 3; 3; 1 hr).	Summary; videos of participants; data sheet	Yes
5. Carnett et al., 2021	Intervention: facilitate AAC use	Segmented video training module; telehealth sessions; allow for questions before and after session.	Researcher	Telehealth sessions: one-on-one, live.	42 min video; telehealth sessions: 10 min (2-3/week)	Pretraining module; SGD with picture symbols.	Yes
6. Chazin et al., 2018	Method/ strategy: AAC modelling	Brief didactic training; coaching with model or verbal prompts; feedback statements	Researcher	Group, in person	One hr	NR	Yes
7. Douglas et al., 2013	Method/ strategy: IPLAN & MORE	PowerPoint presentation; application to videos; discussions; asking questions; creating plans; practice play	Researcher	One-on-one, in person	4 sessions: 1 hr; 20 min; 20 min; 20 min, over 2 weeks	PowerPoint presentation; videos	Yes

		sessions; use of scenarios; self-evaluation; mnemonic; developing plan; implementation with child					
8. Douglas et al., 2013	Method/ strategy: PoWR strategy	Online training activities: PowerPoint with narrations; embedded video models of strategies; apply strategy to video clips; email questions	Researcher	Online, pre-recorded	Own pace over 3 to 5 days.	5 modules; binder of materials; form for PoWR plan.	Yes
9. Ganz et al., 2013	Method/ strategy: PECS	Modelling; practice trials in role-play; review of forms; highlighting protocols; practice trials with trainer; allow for questions; coaching	Researcher	Initial: in a group; one-on-one coaching, in-person	Group workshop: 3 hr, individual: 30 to 45 min	PECS training model; PECS Phase IIIb fidelity form.	Yes
10. Kashinath et al., 2022	Method/ strategy: aided language modelling.	1. Introductory workshop; 2. Planning session: discuss performance from baseline; questions; 3. Coaching: written protocol; skills reminder; initial observation; positive and instructive feedback; modelling; guided problem-solving.	Researcher	Group workshop, one-on-one; coaching sessions in-person;	Workshop: 75 - 90 min, coaching: between five and eight 15 to 20 min over 4 to 8 weeks.	Written protocol for coaching sessions	No
11. Parnell, 2018	Method/ strategy: use of an iPad as an SGD	Train to Code (TTC) training: definitions using computer-based text and videos. Training section; video exemplars; error corrective feedback; visual timing prompts.	Researcher	One-on-one, in person	Average of 323 min to mastery criterion. 2-3 sessions per week for 10 weeks.	Laminated colour-coded job aids; videos of mand training procedures; iPad; Proloqou2Go	Yes
12. Sloman, 2010	Method/ strategy: PECS Phase 1 & 2	Preference assessment overview; role-play; feedback; observation; allow for questions; extension in a different setting	Researcher	One-on-one, in-person	Not specified – to criterion.	Protocol sheets; rationale; assessment; PECS cards	Yes (did not inform experimental conditions)
13. Tapp, 2022	Method/ strategy: supported OTRs	Explanation; constructive feedback; supervisory coaching: setting of goals; graphed data of current rate of supported OTR; review; intervention clips to highlight	Researcher	One-on-one, in-person	Initial training: 1 hr. Supervisory coaching;	Written summary; tools for academic instruction (e.g. Go Talk);	Yes (did not inform experimental conditions)

		correct and incorrect implementation; modelling; role-play; feedback.			ranged from 9 to 27 mins	intervention sessions clips	
14. Walker et al., 2021	Other: FCT	PowerPoint presentation; video; role-play; feedback; implementation with the target student; observation; follow-up coaching (video clips of correct and incorrect implementation; description; demonstration; rehearsal with feedback).	Researcher	One-on-one, in-person	Initial training session: until 90% accuracy. Follow-up coaching: two to three times a week.	Brief teaching guide, PowerPoint presentation; video illustrating FCT; video clips for follow-up coaching	Yes
15. Walker et al., 2021	Other: FCT	PowerPoint; modelling through videos of FCT; role-play; performance feedback; question/ answer session	SET	One-on-one, in person	Initial: 25-43 min, coaching session: average 10 min	PowerPoint; video models of FCT	Yes (for descriptive purposes)
16. Wermer et al., 2018	Method/ strategy: OTR, OTI, LTM	Initial training session: rationale for strategy; definition; modelling; role-play; brainstorm; implementation; allow for questions. Performance feedback: examples of positive implementation; highlighted missed opportunities; corrective modelling; allow for questions	Researcher	One-on-one in person	Initial 10 to 20-min training for each target strategy (OTR, OTI and LTM), feedback: 5 min after observation	Planning sheet	Yes
17. Homlitas et al., 2014	Method/ strategy: PECS Phases 1 to 3.	Verbal instructions and corresponding response checklist; modelling; rehearsal; corrective and positive feedback; question asking allowed at end of each trial block	Researcher	One-on-one in person	26-min video, 15-min video, 15 to 30 min trial blocks, 2 to 3 times per week.	Handouts; preferred items; laminated pictures of preferred and neutral items; checklists	No
18. Rosales et al., 2009	Method/ strategy: PECS Phases 1 to 3	Prior to initial training session: 26 min and 15 min video; described checklists and PECS steps; modelling; rehearsal with a confederate with feedback.	Researcher	One-on-one, in person	Two or three times per week for 45 to 90 min	PECS manual; video of PECS manual; video of a real session; checklists	No
19. Muttiah et al., 2018	AAC in general	Ice-breaker; discussion; strategy description; demonstration with video; videos of own students;	Researcher	Group training with 3 individual	Group training: 3.5 to 4 hr; 3 follow-up	Literacy, music and crafts related activities; video	Yes

		worksheet; prepare script on implementation; development of AAC tools; role-play; follow-up sessions		follow-ups, in person	sessions between 20 and 30 min	from pilot study; videos of own students; training worksheet.	
20. Canosa, 1994	Method/strategy: use of mand-model, time delay, incidental teaching.	Direct instruction; describe intervention, definitions, examples; self-study; allow for questions; review information; role-play; brainstorm ideas for implementation in the classroom; feedback.	Researcher	In pairs, in person;	Two 1 hr training sessions	Manual	Yes
21. Gormley et al., 2023	Method/strategy: offer choice, wait, respond.	Videos, audio narration; demonstration	NR	One-on-one, mobile	15 min	Videos, checklist, Easy VSD app.	Yes
22. Grygas Coogle et al., 2018	Method/strategy: in sight, out of mind; out of reach; choices.	eTraining (presentation with voice-over) distributed via email. Bug-in-ear eCoaching: delivery of prompts during small group activities with affirmative or corrective feedback	Researcher	Online eCoaching (live)	15 min presentation, minimum 6 eCoaching sessions of 6 min each.	Presentation with voiceover	Yes
23. Kent-Walsh, 2003	Method/strategy: Interaction strategy	1. Introductory session: strategy description; videos with guided discussion; visual aids. 2. Commitment. 3. Strategy demonstration: role-play; verbal practice of steps; mnemonic; practice with feedback; practice with instructor; practice with student	Researcher	One-on-one, in person	Until 90% accuracy	4 videos (2 with strategy, 2 without) during interactive book reading with students using AAC; visual aid for implementing the strategy.	Yes
24. McMillan, 2005	Intervention with a device	Device operation training: demonstration; hands-on practice; feedback; error correction.	Researcher	One-on-one, in person	Varied from 30 min to 1.5 hr per session for up to 5 hr	Boardmaker software; students' SGD; written	Yes

		Environmental arrangement and embedding: explanation and examples; allow for questions; observation with feedback; role-play				descriptions of strategies.	
25. Pennington & McConachie, 1996	Method/ strategy: "My turn to speak"	Short talks; discussion; brainstorming; exercises; role-play; videos.	2 clinicians	Group, in person;	Five 90-min sessions spread across 10 to 12 weeks	Video (general principles); video (participants with child)	No
26. Ogden et al., 2022	Other: FCT	Initial training: instruction; modelling; videos; rehearsal; performance feedback; implementation. Follow-up coaching: address incorrect implementation; video clips; modelling; role-play; performance feedback	Researcher	One-on-one, in person;	Initial training: NR, Coaching: Sarah: 5 min Lucy: 2 min; Ivy: not needed.	Handouts; video clips taken during observation session	No
27. McConachie & Pennington, 1997	Method/ strategy: "My turn to speak"	Short talks; brainstorming; group discussion; video analysis; making of intervention plans and implementing in the classroom; review of progress	Program developer; therapists; teachers	Group, in person;	Five 90-min sessions over 10 to 12 weeks	Tutor manual; participant manual; video	No
28. McCulloch & Noonan, 2013	Method/ strategy: mand elicitation	Videos showed teachers using the methods within the classroom setting.	Teacher in video	Online, recorded	3 to 4 days to complete the videos	Online training videos; self-management checklist	Yes
29. McMorran-Maus, 2022	Method/ strategy: KWS	Introduction, completion of personal commitment statement; description; mnemonic; strategy demonstration; imitation of instructor; think aloud while modelling; verbal practice of steps; rote rehearsal; controlled practice and feedback; advanced practice; make plans	Researcher	Group; in-person;	1 day (6 hr)	3 handouts: outline of strategies; KWS vocabulary; memory aids for ASL signs; personal commitment statement form	No
30. Smidt et al., 2007	Assessment & intervention:	Introduction; demonstration; video-record attempts on forms; observe and analyse own videos;	Researcher	Group, in person	4 training sessions.	MOSAIC record forms; sample videos;	No

	MOSAIC	facilitation of discussions; develop comm plan				participant videos.	
31. Wolf, 2014	AAC in general	Interactive presentation; video clips modelling the strategies.	Researcher	Online, recorded	Self-paced, 20-30 min per module	3 online modules	No
32. Estevis, 1996	AAC in general	Brief lecture; video; question and answer session; sharing of experiences; worksheet; identification of comm behaviour in videos; immediate feedback	Researcher	Group, in-person	1 day	"Getting in touch" video; list markers; visual aids for comm; pretest video	Yes
33. Tsai et al., 2011	Method/ strategy: strategies for comm opportunities	Description; review; modelling; rote rehearsal; practice implementation in controlled environment; instructor prompting and feedback; practice in a natural environment.	SLP	One-on-one, in-person	10 weeks	Hand-outs	Yes
34. Hayes & Taughber, 2021	Method/ strategy: MAKE AAC successful	Workshop for all: stages 1-5 of eight-step instructional method; (hierarchy charts; mnemonic). Experimental group: stages 6-8; baseline video; strategy demonstration; coaching; feedback; implementation	NR	Group, in-person;	7.5-hr district workshop;15 min strategy demonstration; 15min implementation	Hierarchy charts; mnemonic; baseline video for review	Yes

ASL – American sign language; comm – communication; FCT – functional communication training; hr - hour KWS – key word signing; LTM- least to most prompts; min – minutes; NR – not reported; OTI – opportunities to initiate; OTR: opportunities to respond; PECS- picture exchange communication system; SET– special education teacher; SLP – speech language pathologist; SGD – speech generating device