

Assessment measures: quick reference



Hear and Say

Functional, parent-report and standardised measures used in listening and spoken language practice

Tool	What it measures	Completed by	Best suited to
CAP / CAP-II	Everyday auditory performance, as a single category	Clinician rating	All ages; broad tracking over time
CAPI	Speech perception and listening level (1–8), linked to testing	Clinician rating against defined criteria	Consistent service reporting over time
SIR	Intelligibility of connected speech (5 levels)	Clinician rating	Children using connected speech
LiHIEARS	Early auditory development (35 yes/no items)	Parent questionnaire	First two years of hearing age
FLI-P	Functional listening in everyday situations (64 items, 6 phases)	Parent or professional who knows the child well	Birth to 6 years; tracking a listening trajectory
PEACH / TEACH	Everyday listening and communication in quiet and noise	PEACH: parent. TEACH: teacher or educator	Under 5 years; checking device benefit
MacArthur-Bates CDI	Early vocabulary, gestures and grammar	Parent checklist	8–37 months (by form)
FAPI	Functional listening skills across 7 categories	Clinician observation	Young children; linking to therapy goals
MAIS / IT-MAIS	Meaningful use of sound in daily life (10 items)	Structured parent interview, clinician scored	MAIS: 3 years and over. IT-MAIS: under 3
LIFE-R	Listening challenges in school situations (15 items)	Student self-report; matching teacher form	School age (about 8+); planning and checking classroom supports
SSQ	Speech hearing, spatial hearing and sound quality	Self-report (adults and older children); parent version	SSQ-P: 5 years and over. SSQ-C: about 11 and over. Adults

CAP / CAP-II (Categories of Auditory Performance)

A clinician rating of how a child uses hearing in everyday life, developed in Nottingham by Archbold and colleagues. The child is placed in the single category that best matches their highest consistent listening skill.

- **Original CAP:** 8 categories, from 0 (no awareness of environmental sounds) to 7 (uses the telephone with a known speaker).
- **CAP-II:** adds two higher categories: following group conversation in a reverberant room without visual cues, and using the telephone with an unknown speaker.

It is quick and easy to track over time and across programs. The descriptors are broad, so it works best as a summary alongside other measures.

CAP and CAPI: what's the difference?

Both place a child's listening in a single category on a ladder, but they were built for different purposes and their scores are not interchangeable.

	CAP / CAP-II	CAPI
Developed by	Archbold and colleagues, Nottingham (1995)	Jane Black and colleagues, Australia (2012)
Range	0–7 (CAP-II 0–9)	1–8
Basis	Clinician rating of everyday listening behaviour	Defined criteria linked to testing and scoring
Most detail at	Early sound awareness	Speech perception and advanced listening
Best for	Comparing with international research; early stages	Consistent service reporting over time

- **CAPI levels:** 1 detects sound; 2–3 recognise words from a closed set; 4 and above is open-set listening; 8 is excellent listening, including in noise. A revised version, the CAPI-R, is also available.
- **In practice:** use CAPI for internal and annual reporting so trends stay consistent, and CAP when comparing with published research or other services. Don't mix the two in one trend or chart: a CAPI 4 is not the same as a CAP 4.

SIR (Speech Intelligibility Rating)

The companion scale to CAP, also from Nottingham. A clinician rates how understandable the child's connected speech is on a 5-point scale:

1. Speech is unintelligible (pre-linguistic).
2. Speech is unintelligible, but single words can be understood with context and lipreading.
3. Speech is intelligible to a listener who concentrates and lipreads.
4. Speech is intelligible to a listener with little experience of deaf speech.
5. Speech is intelligible to all listeners.

Like CAP, it is quick and gives a simple picture of change over time.

LitHEARS Auditory Questionnaire

A parent questionnaire published by MED-EL for early auditory development. It covers roughly the first two years of listening, measured as hearing age from device fitting rather than chronological age.

- 35 yes/no questions that follow the order of typical development, from early awareness of sound to understanding simple instructions.
- The total score can be compared with a normative curve for typically hearing children.
- Useful for infants and toddlers, and for checking early progress after hearing aid fitting or cochlear implant activation.

FLI-P (Functional Listening Index – Paediatric)

Developed by The Shepherd Centre and The HEARing CRC, based on clinical research since 2013. It tracks a child's listening skills in everyday situations from birth to 6 years, and can be completed by a parent, caregiver or professional who knows the child well.

- **Six phases, 64 items:** sound awareness; associating sound with meaning; comprehending simple spoken language; comprehending language in different listening conditions; listening through discourse and narratives; and advanced open-set listening.
- **Scoring:** each skill is marked 'mostly' or 'rarely', stopping after six 'rarely' responses in a row. The total is plotted against chronological age on a listening trajectory chart.
- **Listening alone:** items are checked without visual cues such as pointing, gesture or lipreading, usually in quiet at close range.
- **How often:** ideally every 8–12 weeks, or more often if there are concerns.

It suits any degree or type of hearing loss, children with additional needs, and children learning languages other than English. Normative data for typically hearing children is being collected. If you publish data collected with the FLI-P, its conditions of use ask you to acknowledge the tool and notify The Shepherd Centre first.

Form and user guide: [FLI-P v2.1 \(hearhub.org\)](https://hearhub.org)

PEACH and TEACH (Parents' and Teachers' Evaluation of Aural/Oral Performance of Children)

Developed by Teresa Ching and colleagues at the National Acoustic Laboratories (NAL). The PEACH records how a child under 5 hears and communicates in everyday life, based on what parents have seen over the past week. It is not a test.

- **Format:** 13 questions rated from never (0%) to always (76–100%). The first two cover device use and discomfort with loud sounds; the rest give scores for listening in quiet and in noise, and an overall score.
- **Norms:** scores are plotted against age-based normative data for typically hearing children (Ching and Hill, 2007).
- **PEACH+:** adds ratings of how easy listening is for the child in each situation.
- **TEACH:** the matching questionnaire for teachers and early childhood educators, covering the child's listening at childcare, kindy or school.

Used together, they show whether listening at home matches listening in an educational setting. They are especially useful for checking the benefit of hearing aids, cochlear implants or assistive technology such as remote microphones, which is how the Hear and Say protocol uses PEACH+.

PEACH form: [PEACH v4.1 \(outcomes.nal.gov.au\)](https://outcomes.nal.gov.au). TEACH is available from the same NAL outcomes site.

MacArthur-Bates Communicative Development Inventories (CDI)

A set of parent checklists for early language development, developed by Fenson and colleagues (2nd edition, 2007). Parents mark the words and skills their child understands or uses, and scores are compared with percentile norms by age and sex.

- **Words and Gestures:** 8–18 months. Words understood and said, and early gestures such as pointing and waving.
- **Words and Sentences:** 16–30 months. A vocabulary checklist of 680 words the child says, plus early grammar and word combinations.
- **CDI-III:** 30–37 months. A shorter form covering vocabulary, sentences and language use.

It captures the whole of a child's everyday vocabulary, which is hard to sample in a session, and is valid and reliable for young children. For children with hearing loss it is often interpreted against both chronological and hearing age. An Australian English adaptation, the OZI, is also available.

FAPI (Functional Auditory Performance Indicators)

An observational tool developed by Stredler-Brown and Johnson. It looks at how a child uses listening in real situations across seven skill categories, arranged as a hierarchy:

1. Awareness and meaning of sounds
2. Auditory feedback and integration
3. Localising sound
4. Auditory discrimination
5. Auditory comprehension
6. Short-term auditory memory
7. Linguistic auditory processing

Each skill is rated by how consistently the child shows it, from not present through emerging to acquired, and under different listening conditions. The result is a detailed profile that links directly to therapy goals.

MAIS and IT-MAIS (Meaningful Auditory Integration Scales)

MAIS (Robbins, Renshaw and Berry, 1991) is for children aged about 3 and over. It is a structured interview: the clinician asks the parent 10 questions using open-ended prompts, then scores each answer from 0 (never) to 4 (always), for a total out of 40. The questions cover three areas:

- **Bonding with the device:** wearing it willingly and noticing when it isn't working.
- **Alerting to sound:** responding to their name and to environmental sounds.
- **Deriving meaning from sound:** telling voices and sounds apart, and linking sounds to their source.

IT-MAIS (Zimmerman-Phillips, Robbins and Osberger) adapts the MAIS for infants and toddlers under 3. The first two questions ask about vocal behaviour instead, such as whether vocalisations change when the device is switched on.

Both are quick and useful before and after hearing aid fitting or cochlear implant activation. Because they are interviews, results depend on skilled probing, and scores are best tracked over time for the same child.

LIFE-R (Listening Inventory For Education – Revised)

Developed by Karen Anderson, Joseph Smaldino and Carrie Spangler (2011). It shows how hard listening is for a student in real school situations, from the student's own point of view, and is used to plan classroom accommodations and self-advocacy goals. It is free to use, in paper and electronic versions.

- **Student Appraisal:** 10 classroom and 5 social listening situations at school, such as a classmate answering from behind or listening in a noisy hall. Each is illustrated and rated on a 5-point scale from always easy to always difficult. Suits students from about 8 years, usually completed with support from a teacher of the deaf or audiologist.
- **Before and After LIFE:** short question sets that help the student describe their classroom first, and then look at how they respond when listening is hard. The online version uses these to suggest self-advocacy skills to work on.
- **Teacher Appraisal:** the teacher rates how challenged the student is in the same 15 situations, for a total out of 75.
- **Pre- and post-test:** both forms can be repeated to check the effect of a change, such as a remote microphone trial or seating and acoustic changes.

Used together, the student and teacher forms show whether an intervention made a difference and where the student's and teacher's views differ.

Online tool and forms: [LIFE-R \(successforkidswithhearingloss.com\)](https://www.successforkidswithhearingloss.com)

SSQ (Speech, Spatial and Qualities of Hearing Scale)

Developed by Stuart Gatehouse and William Noble (2004) as an adult self-report questionnaire. It covers real-life listening that clinic tests capture poorly, such as following a group conversation, telling where sounds are coming from, and how natural sounds seem. Each item is rated from 0 to 10, where a higher score means better ability.

- **Speech hearing:** understanding speech in quiet, in noise, in groups and when switching between talkers.
- **Spatial hearing:** judging the direction, distance and movement of sounds.
- **Qualities of hearing:** clarity and naturalness of sounds, telling sounds and voices apart, and listening effort.
- **Versions:** the adult SSQ has 49 items, and shorter forms such as the SSQ-12 are available. Galvin and Noble (2013) adapted it for children: the SSQ-P for parents of children aged 5 and over, and the SSQ-C for children to complete themselves from about 11 years.
- **Parent version:** the SSQ-P is designed to be completed after a briefing and three week-long observation periods, one for each section. Parents filling it in without this often find some items hard to answer.

It is especially useful for showing the benefit of two devices (bilateral cochlear implants, or bimodal fitting) and for unilateral hearing loss, where spatial hearing and listening effort are often where the difference shows.

Standardised assessments

Standardised tests are given and scored in the same way every time. The language and vocabulary tests below are norm-referenced: a standard score of 100 is average and 85–115 is the average range, compared with typically hearing children of the same age.

Test	What it measures	Ages	Scores
PLS-5	Preschool Language Scales. Auditory comprehension and expressive communication, through play and pictures	Birth to 7;11	Standard scores for each scale and total language
CELF-P2 / CELF-5	Clinical Evaluation of Language Fundamentals. Core language skills: concepts, sentence structure, word structure and following directions	CELF-P2: 3;0–6;11. CELF-5: 5;0–21;11	Core language score and index scores
PPVT-5	Peabody Picture Vocabulary Test. Receptive vocabulary: the child points to one of four pictures for a spoken word. Two forms (A and B) for retesting	2;6 to adult	Standard score and age equivalent
EVT-3	Expressive Vocabulary Test. Naming pictures and giving synonyms. Co-normed with the PPVT-5, so receptive and expressive scores can be compared directly	2;6 to adult	Standard score and age equivalent

The speech perception tests below also use set materials and procedures, but they report percent correct or a perception category rather than a comparison with typically hearing peers.

Test	What it measures	Ages	Scores
ESP	Early Speech Perception test (Moog and Geers, CID). Closed-set listening with pictures or toys: syllable patterns, spondees and single words. A low-verbal version suits younger children	From about 2 years	Speech perception category (1–4)
PBK	Phonetically Balanced Kindergarten word lists. Open-set single words, repeated back with no pictures to choose from	From about 5 years	Percent words (and phonemes) correct
BKB-A	Bamford-Kowal-Bench sentences, Australian version. Open-set simple sentences, in quiet or in background noise	School age and older	Percent key words correct

Most norms are based on typically hearing children, so results are best read alongside functional and parent-report measures. Speech perception tests move from closed set (ESP) to open set (PBK, then BKB-A in noise) as listening develops.