

BIMODAL BILINGUAL DEVELOPMENT SCALE

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The Bimodal Bilingual Development Scale was developed by Dr Elizabeth Levesque as part of her research into the bilingual acquisition of English and Auslan (Australian Sign Language) by young deaf children.

The Scale is designed to help families, caregivers, educators, and other professionals to understand the sequence of language milestones when signed and spoken languages are acquired bilingually. As is typical of all natural languages, it is important that young children develop their language skills in rich, stimulating environments with fluent language models during their early developmental years.

The Bimodal Bilingual Development Scale has been endorsed by Professor Adam Schembri, a leading Auslan linguist and international researcher in signed languages of Deaf communities.

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BIMODAL BILINGUAL DEVELOPMENT SCALE

Name of child: _____

E: Emerging
C: Consolidated

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
0;0-0;3	<p style="text-align: center;"><u>Pre-intentional</u></p> <ul style="list-style-type: none"> ▪ coos ▪ vocal play ▪ cries, smiles, to express needs ▪ turns towards the speaker 		<p style="text-align: center;"><u>Pre-intentional</u></p> <ul style="list-style-type: none"> ▪ hand movements ▪ moves arms/legs to communicate ▪ cries, smiles, to express needs ▪ turns towards signer 		<ul style="list-style-type: none"> ▪ responds to familiar touch, voices, faces ▪ smiles ▪ quietens, looks intently at familiar voices/faces 	
0;3-0;6	<p style="text-align: center;"><u>Intentional</u></p> <ul style="list-style-type: none"> ▪ vocalises to stimuli ▪ says 'm'; makes mouth movements when talked to ▪ syllable-like vocal play, with long vowels ▪ uses voice to make contact with people and to keep their attention ▪ starts to respond to name 		<p style="text-align: center;"><u>Intentional</u></p> <ul style="list-style-type: none"> ▪ starts to copy signs, gestures ▪ uses facial expressions to communicate ▪ manual movements show emergence of rhythm ▪ uses gestures to attract and maintain attention, request, refuse, reject 		<ul style="list-style-type: none"> ▪ smiles, takes turns, attends to faces ▪ laughs to express pleasure ▪ cries at angry voices and faces ▪ maintains eye contact ▪ puts arms up to be lifted ▪ copies facial expressions; reaches towards objects 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
0;6-0;9	<ul style="list-style-type: none"> canonical ('reduplicated') babbling, e.g. 'baba', 'gaga' vocalises for attention uses voice to join in with familiar rhyme/game recognises and responds to own name voice tuneful and expressive, starting to have tone and rhythm 		<ul style="list-style-type: none"> manually babbles, using rhythmic hand movements, e.g. repeated opening & closing hands, wiggling fingers uses hand movements for attention uses gestures to join in with familiar rhyme/game responds to visual and tactile attention-gaining strategies 		<ul style="list-style-type: none"> likes attention plays Peek-a-Boo points to request uses two gestures or gesture and vocalisation to: attract attention, ask for things, refuse becomes excited when taking turns 	
0;9-1;0	<ul style="list-style-type: none"> uses voice to direct attention to objects people and self variegated babbling imitates new speech sounds approximates words gestures and points understands approximately 10-12 words 		<ul style="list-style-type: none"> uses gesture/sign to direct attention to objects, people and self manually babbles with more rhythm imitates familiar signs, e.g. mummy, milk, eat approximates signs - simple handshapes understands approximately 10-12 signs 		<ul style="list-style-type: none"> begins to point to objects, self and others close by makes it clear through gesture, sign or vocalisation when they want something to happen again emergence of engagement in joint attention 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
1;0-1;6	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 50 words follows 2 word commands listens to favourite story points to pictures/objects when asked (1;0-1;3) turns when name called responds appropriately to wider range of sounds, words, phrases through listening <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> intonation and jargon babbling makes animal sounds (1;0-1;3) longer vocalisations have recognisable words and sounds, but meaning is unclear vocalisations sound more like speech plays vocal games with adult, copies their sounds 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 50 signs by 1;6 follows simple instructions, e.g. book (point) + give + Daddy sustains attention to favourite story points to objects when asked (signed) responds consistently to visual and tactile attention-gaining strategies <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> 'unmarked' handshapes: flat, point, spread, fist, good, cup, 1 handed O'  <ul style="list-style-type: none"> joints closest to torso e.g. shoulder, elbow, usually used ('proximalisation') location usually correct; movement correct 50% of the time; handshapes correct less than 25% of the time (depending on complexity of sign) 		<ul style="list-style-type: none"> imitates other children initiates routines uses words/signs to: request information label comment respond greet call responds to adult conversation but often not on the same topic chatters/signs to self while playing more initiation and response to joint attention plays 'ready set go' games 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
1;0-1;6 cont.	<ul style="list-style-type: none"> first words over/under-generalised uses 10-15 words imitates familiar words combines single words with point gestures similar to words (1;2-1;4); different to words (1;4-1;6) uses single words with intonation to ask simple questions 		<ul style="list-style-type: none"> first signs over/under-generalised uses 10-15 signs imitates familiar signs combines sign & point; points to objects – not always people some signs similar to gestures yes/no questions use non-manual features; 'wh' signs may emerge 		<ul style="list-style-type: none"> understands social scripts; acts out daily routines in play anticipates key phrases in games gives toy or object to adult to request assistance in how to use it 	
1;6-2;0	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 75 words by 1;6, up to 100 words by 1;9, 250-300 words by 2;0 understands wh- questions follows simple commands understands prepositions in/on 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands more signs and fingerspelling, in more complex structures understands wh- questions follows simple commands 		<ul style="list-style-type: none"> uses speech/sign to respond to adult input more topically contingent uses longer utterances to express intentions, e.g. reject protest notice label initiate pretend play 	






Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
1;6-2;0 cont.	<p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses range of consonant and vowel sounds in 'words' more often than 'word-like' approximations 1;6-1;9: uses over 20 words with correct meanings & more accuracy in pronunciation; 1;9-2;0: expressive vocabulary at least 50 words 2-3 word utterances appear possible pronoun reversal errors asks wh- questions no syntactic or morphological markers 		<p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses a wider range of handshapes, in more complex combinations with locations and movements uses up to 20 signs by 1;6-1;9 uses up to 50 signs by 2;0 first 2-sign utterances, with pointing to objects and people; may prefer SVO order e.g. SV or VO some pronouns reversed (e.g me/you) uses wh-question signs; non-manual features (NMF) may disappear temporarily, but NMFs for yes/no questions may occur no productive morphology: citation form of verbs and nouns used some negator signs (eg. NOT) signed, but not used with NMFs possible use of some common depicting signs, 1 handed only 		<ul style="list-style-type: none"> talks/signs to self continuously when playing, although may not be readily understood by adults practises familiar conversational behaviours, e.g. book reading, shopping, doctor's visit 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
2;0-2;6	<u>Receptive Language</u> <ul style="list-style-type: none"> understands up to 600 words follows two stage commands understands more questions and prepositions recognises family members' names 		<u>Receptive Language</u> <ul style="list-style-type: none"> understands hundreds of signs follows two stage commands understands size, quantity and location descriptions 		<ul style="list-style-type: none"> announces intentions takes 2 conversational turns introduces and changes conversational topic clarifies and 'repairs' communication bids uses words/signs to express emotion 	
	<u>Expressive Language</u> <ul style="list-style-type: none"> uses up to 200 words speech becoming more intelligible; still contains many approximations uses more questions, prepositions beginning morphological devt. uses personal pronouns uses 'don't' and 'can't' uses adverbs e.g. 'now', 'again' 		<u>Expressive Language</u> <ul style="list-style-type: none"> uses approximately 200 signs many handshapes and movements still simplified; location can be on face/body uses a greater number of wh- signs most verbs in citation form personal pronouns correct by 2;6 noun-verb pairs may be incorrect no spatial syntax - SVO word order used combines facial expression + sign 			

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
2;6-3;0	<u>Receptive Language</u> <ul style="list-style-type: none"> understands up to 900 words understands all pronouns follows questions follows 2-3 step commands 		<u>Receptive Language</u> <ul style="list-style-type: none"> understands more complex signs understands all pronouns answers wh- and yes/no questions follows 2-3 step commands 		<ul style="list-style-type: none"> converses in sentences attempts to control events by using speech/sign uses 'polite' discourse behaviour 	
	<u>Expressive Language</u> <ul style="list-style-type: none"> uses up to 450 words uses 4-5 word sentences different sentence forms develop e.g. statements, questions answers yes/no questions, what happened joins sentences using conjunctions, e.g. 'and', 'but' over-generalisation of morphology, e.g. 'goed' retells story uses infinitives, e.g. 'I like to swim' 		<u>Expressive Language</u> <ul style="list-style-type: none"> uses 400 signs 4+ sign utterances, simultaneous grammar emerging most common depicting signs used; frequent errors in handshapes noun-verb pairs shown through facial expression, body posture or speed use of indicating verbs emerging; not yet marking manner through facial expression, altered movement retells story fingerspelling emerging 		<ul style="list-style-type: none"> responds to requests to clarify or repair language apologises, using appropriate language 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
3;0-3;6	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 1,500 words understands plural vs singular commands <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses up to 900 words most speech sounds intelligible uses more complex grammar uses 'won't', 'is he?', 'are you?' uses plurals, possessives, indefinite articles uses subject pronouns 'we', 'she', 'they' and object pronouns 'her', 'him', 'them' 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands longer utterances with more complex grammar <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> more accurate use of handshapes, locations and movements, although still errors and substitutions some sequential movement in depicting signs indicating verbs more accurate for present people, objects; some verb modifications omitted for absent people, objects correct use of noun-verb modifications stories not coherent due to lack of spatial consistency modifications for number & aspect used (not mastered till over 5;0) topicalisation used with NMFs NMFs for negation starting to emerge - not for all negator signs 		<ul style="list-style-type: none"> takes 4-5 conversational turns uses 'fillers' e.g. ok, uh huh, mm, nod, gestures begins to change register to suit younger child requests permission teases, jokes corrects others uses descriptions to clarify meaning requests, using yes/no questions 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
3;6-4;0	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 3,000 words <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses up to 1,500 words irregular verbs 'drank', 'swam' 3rd person singular: /s/ 'he runs' uses 'isn't', 'aren't', 'would', 'could', 'should' past tense 'was', 'were' infinitives 'I want him to do it' uses reflexive pronouns e.g. 'myself', 'yourself' seeks detailed information with 'wh' questions joins clauses 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands longer utterances recognises more fingerspelled patterns <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> verb modification consistent across sentence - not maintained over discourse use of inflection for spatial verbs for movement or manner, not yet combined some use of NMFs of wh-questions and conditionals emerges role shift used in discourse IF/ PRETEND used for conditional sentences, NMFs not yet used compounds used, but with no stress change some verb agreement for absent people or objects, but referents are not established in space first 		<ul style="list-style-type: none"> has long, detailed conversations tells 2-3 events in correct order mixes real and imaginary details in story knows to wait if others are talking/signing more confident in a range of social situations 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
4;0-4;6	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands up to 3,000 words <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses more than 1,500 words, speech consistently intelligible uses infinitives, possessives contracts auxiliary 'they're –' uses 'has', 'does' past progressive: 'I was running' uses 'because' in clauses asks 'what if?' 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> comprehends non-manual markers, but use is inconsistent comprehension of verb agreement emerging - some errors <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> more use of abstract locations in space occasional over-generalisations of verb inflections; clear noun-verb distinction role-shift, body shift, eye gaze used more effectively to describe events in story many depicting signs not yet adult-like most handshapes correct, e.g. 		<ul style="list-style-type: none"> correctly changes reference using this/that, here/there ends conversations appropriately changes conversational topics appropriately uses wh questions as indirect requests 	
4;6-5;0	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands 6,000 + words follows 3 commands in a sentence <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses more than 2,000 words uses comparatives: 'better', 'best' 		 '8 Middle'  'R Wish'  'W Three'  'X Hook'  'A Fist' variant		<ul style="list-style-type: none"> uses hints as indirect requests cues in conversation partner by giving preliminary information e.g. 'John, my friend's brother' 	

Age	English	E C	Auslan	E C	Pragmatic Language Skills	E C
4;6-5;0 cont.	<ul style="list-style-type: none"> uses more adjectives includes more reflexive pronouns: e.g. 'herself', 'ourselves' uses 'neither', 'whether', 'if' uses present perfect: 'I have been' uses negative tags: 'didn't we?' uses: 'does?' 		<ul style="list-style-type: none"> 2-handed depicting signs: relative location approximately 30% correct; handshape use: dominant hand approximately 70% correct, subordinate hand 30% correct 		<ul style="list-style-type: none"> politely interrupts conversations confidently initiates conversations about a range of topics 	
5;0-8;0	<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> by 6;0 understands 13,000+ words by 8;0 : 20,000+ words <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> uses 3,000-6,000 words uses irregular adverbs masters reflexive pronouns masters plural demonstrative pronouns e.g. 'these', 'those' uses past perfect tense and conjunctions 'although', 'unless' in clauses 		<p><u>Receptive Language</u></p> <ul style="list-style-type: none"> understands longer utterances with more complex grammar <p><u>Expressive Language</u></p> <ul style="list-style-type: none"> most verb modifications mastered maintains cohesion across text more use of role shift in narratives most morphology mastered wh- NMFs mastered by 8;0 signs and NMFs used for direct quotes by 6;0-7;0 		<ul style="list-style-type: none"> makes threats, insults, promises, apologies; praises negotiates rules of play 6;0-8;0: gives multi-step directions checks comprehension of others explains events fully responds appropriately to compliments learning to understand non-literal meanings, sarcasm and metaphor 	

Elizabeth Levesque PhD 2008. Revised in 2013 and 2015 with Prof. Adam Schembri

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GLOSSARY

Aspect	The manner in which a verb is inflected, or how it changes according to what it is 'doing'. It refers to how long an action takes to happen, such as the actions of jumping or running. The movement of the sign is directly related to the particular meaning, or aspect of the verb.
Canonical babbling	Includes 'reduplicated' babbling: identical, repetitive sequences of consonant-vowel syllables, e.g., mama, dada); and 'variegated' babbling: sequences of different consonants and vowels, e.g. ga/im/ada. These productions are not true words, as they lack meaning.
Citation form	A sign that has not been varied or modified.
Classifier	A sign or handshape that can be used in different ways, depending on its function. One of the most easily recognisable types of classifiers is the Proform classifier, which refers to signs which have previously been referred to in a conversation. Descriptive classifiers can be used to describe the sizes and shapes of various objects, their texture, arrangements and also how one handles the object.
Compound sign	A sign that is made up from two separate and distinctive signs, e.g. TASTE+GOOD = delicious. There are slight changes in movement and production of both signs so that overall duration is similar to a single sign.
Conditional sentence	An utterance that contains two parts; the first part describes a possible event and the second part describes the conditions required for that event to happen, e.g: 'If it rains tomorrow, we can't go to the zoo'. A conditional sentence is preceded by fingerspelling 'IF' or signing 'PRETEND' or by the use of non-manual features such as raised eyebrows and backwards head tilt.
Depicting signs	Signs that are used to describe the properties of objects in the same way descriptive words are used in spoken languages.
Fingerspelling	A system of hand configurations that represent the letters of the alphabet. May be one or two-handed.

Handshape	Positioning of fingers and thumb in relation to the whole hand to depict a sign.
Inflectional verb	A sign that can be modified in manner and movement to show how something happens, e.g. walk, stroll, hurry.
Jargon	Also known as intonated babble. Infants produce long strings of syllables with varied stress and intonation patterns. Jargon may sound like whole sentences and often co-occurs with real words but lacks linguistic content or grammatical structure.
Locations in space	The space in which the signer moves signs; involves the signer referring to an object between themselves and their communication partner. Syntactic space uses grammatical structures which move in space between defined points.
Manual babble	Unique to visual-gestural languages. Rhythmic hand movements, such as repeated opening and closing, tapping and waving. Babies make sign-like actions in imitation of the signed language they see around them and play with the rhythmic patterns underlying sign language.
Morphological	Related to morphemes – the smallest grammatical unit in a language. For example, in English, /s/ is usually added to modify a word to denote that it is plural; in Auslan, signs are moved differently or placed in a different location to denote a modified meaning of that sign.
Non-manual features (NMF)	Also known as non-manual markers. Facial expression (raised or lowered eyebrow movements, eye gaze etc.), head or body movements, mouth movements.
Non-manual features (NMF) for negation	Headshake used simultaneously with verb sign, e.g. I don't like: LIKE+headshake.
Noun-verb pairs	Two signs that relate to each other in meaning but differ in production, such as a slightly altered movement or non-manual features like facial expression. For example: PLANE and PLANE-FLYING.
Over and under-generalisation of signs	An over-application of rules to irregular parts of the language, e.g. adding reduplications (repeating movements) to single-movement signs in an attempt to make a sign more like the adult target. Under-generalisation: for example: using sign for 'daddy' to denote all men.

Phonology	The branch of linguistics concerned with the study of sounds (phonemes) in languages. Australian English has 44 phonemes; Auslan's phonology comprises a relatively small number of handshapes, orientation, location and movement that produce thousands of signs.
Pragmatic language	Also known as communicative competence. The ability to use language to effectively communicate with others in socially appropriate ways, incorporating the rules and expectations of a particular culture.
Proximalisation	Typical in children aged approximately 12 months. Describes children as initially having more control of their proximal joints, i.e. limb joints closest to the torso, such as shoulder or elbow. The child develops control of more distal joints (further away from torso, such as wrist or fingers) during maturation.
Referent	An object or person referred to.
Role shift	A syntactic device used by signers to denote utterances, thoughts and actions of participants in a conversation. Role shift is signalled by use of body shift, head turns, eye gaze and other subtle movements.
Simultaneous grammar	The use of grammatical features, such as depicting signs, space and non-manual features, to express concepts that are typically presented sequentially in spoken languages. More complex signed utterances may contain fewer lexical items than spoken equivalents but contain the same richness of grammar.
Spatial consistency	Maintaining specific space assigned to an object or person (may be absent) at the start of a narrative so that communication partner/s can identify who is being referred to.
Topicalisation	A process of highlighting the part of a sentence that the signer wants to make more prominent. The topic usually represents the first major element in a sentence and is usually placed at the front of the sentence, particularly for children.
Variegated babbling	Sequences of different consonants and vowels.
Verb agreement	Signs can show 'who did what to whom' through their movement. The movement of the sign indicates the subject and the object of the verb.

Visual and tactile attention-gaining strategies	Typically used by parents with deaf children. Includes strategies such as waving in child's visual field, tapping on child's arm/leg, tapping hand/foot on hard surface, moving head/body in child's visual space, moving object into child's line of vision, placing hand over object/toy to redirect attention.
WH questions WH questions NMF	Content questions that require more than a yes/no answer. In English, most content questions start with 'wh': where, what, which, who, when, why. Also included: how-many, how-much, how-old. Use of non-manual features when asking questions, e.g. furrowed eyebrows, slight backwards head tilt or forward lean of the body.

Bimodal Bilingual Development Scale

Observations made by: _____

Child's name: _____

Date	Age of child	Comments