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for deaf babies, children & adults



Complete Bilingualism

Achieving full access to both British Sign
Language (BSL) and English

By Cate Calder and Anne Worsfold
for the Cued Speech Association UK

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Introduction

Guiding principles

The firm belief that deaf children can acquire a native-like fluency in both spoken and signed languages and that the time has come to challenge the culture of low expectations in this area.

We believe that for many deaf children it is important that they have the option of access to both BSL and the spoken language of their family and wider society.

This document looks at how true bilingualism, with access both to BSL **and** compete access to English can be achieved, particularly for deaf children born to hearing parents.

Communication and language

A Common Scenario

All too often an approach is used that offers, at best, only a certain level of 'communication' in both languages but mastery of neither. For example: A hearing parent or teacher may say to a hearing child:

"Go and put your coat on. It is raining buckets outside so we need to give ourselves plenty of time to get there."

They may sign and say to a deaf child:

"Coat now. Rain. Time, go"

Has the general message been communicated to the deaf child? *Yes*. Will they go and put their coat on? *Probably*. Have they received a fair and full representation of **either** language? *No*.

Using true un-voiced BSL would have given a full account of the message; but so often in an attempt to give 'total communication' the two languages are mixed together and no one wins. It **is** possible to speak and simultaneously sign some nouns and verbs that correspond in both languages but only to a certain degree and this does no justice to the grammar of either language. Also nouns and verbs do not make a language: cup, milk, brother, sister, table, bed, coat with a few 'hellos', 'more please' and a 'thank you' is communication and **not** language. All too often parents are not made fully aware of the possible negative consequences of settling for '*just adding some signs to their spoken message*' they hear themselves say the word in English as they use the sign and so assume their child is 'getting' the English and the sign. Learning some signs may improve basic communication in the home and help with behaviour management but they need to be clear that this limited pigeon sign is not going to 'unlock' their child's full potential for either language.

The Importance of early language

The impact of having limited language in early years has profound and lasting effects on a deaf child's access to education and later life choices. Hearing children begin school with an average (largely oral) vocabulary of 3000 words for the poorest performing children, and upwards of 7,100 words for the more highly performing children, (Biemiller, A., and Slonin, N., 2001¹²). This shows that they do have a functioning language already in their heads and the skills necessary to add to that vocabulary. They also have, albeit unconsciously, the ability to understand and use the **grammar** of their spoken language. Deaf children begin school with an average vocabulary of 500 words/signs (Sterne. A. 1997¹³), and rarely any useful grammar. Significant and intensive language 'repair' work is needed to address these gaps in basic language skills, although the pressures of the National Curriculum leaves little time to redress this balance. This means that Teachers of the Deaf and others working to educate these deaf children have had to make many adaptations, as evidenced by the nationally recognised qualification in 'Modifying Written English Texts for Deaf People'. Advice on language modification for teachers includes:

- 'Keep sentences short.
- Use frequent vocabulary.
- Consider adding a glossary.
- Avoid passives, complex sentences, idioms.'

To reach their potential in today's world all children need to be fully literate but many deaf children are being let down. We are interested in ways to prevent this level of 'language modification' being necessary in the first place, and we know it is possible as some deaf children **are** succeeding on a par with their hearing peers. There is information about how later in this document.

Informing this document

Some well researched facts:

- Approximately 90% of deaf children are born into hearing families.
- All children have a main 'window of opportunity' when they are most able to absorb and develop language - this is from birth to approximately 4 years of age.
- National Deaf Children's Society (NDCS) research found that 81% of hearing parents with a deaf child never learn to fully communicate with that child.

How does any child learn a language?

Actually, children do not have to 'learn' language in the formal sense of the word. They simply absorb it if certain vital factors are in place:

- **Constant exposure** to language in everyday face-to-face situations.
- **Good language models** – people who are fluent and able to give a complete representation of that language.
- **Context** – observing the context in which words are used, e.g. the word 'cat' is used when a real cat is present - which leads to the ability to communicate about the cat when it is not present.

Deaf children, in a bilingual model require full easy access to:

- BSL used by fluent users
- accessible English used by fluent users

Complete bilingualism - Full access to both BSL and English

This report contains more text about making English accessible than it does about BSL. This is not a reflection on the relative importance of the two languages but reflects the fact that BSL, as a visual language, is fully accessible if it is delivered consistently by competent users of the language whereas the way in which English can be rendered visually fully accessible is less well-known and requires more explanation.

The authors believe that it is important to recognise the fundamental differences between English as a language of sound that has a *written* form and BSL, a silent spatial language that has *no* written form. Whilst fluency in either can **support** the learning of the other, the integrity of both languages is compromised if they are not recognised and used as separate languages each deserving equal recognition and skill.

Full, easy access to BSL

It is self-evident that BSL, as a visual language, is fully accessible to deaf children **if** it is used consistently by competent users.

Deaf adults are the keepers of sign language for the next generation. Deaf children born into signing Deaf families have instant access to this fluent language; deaf children born into hearing families do not. We believe that the input of Deaf adults is vital, both as visitors to hearing homes and directly in schools, if deaf children are given access to good quality BSL at language level. However, provision of such a 'language role model' service is scant throughout the country and even where it is provided, it is often intermittent and over-stretched. *Even where good BSL role models are available and even with a very significant time input (both from professionals and parents), they can't take the place of the every-day home-based language learning that occurs in families.* In addition, competent BSL use needs to be increased in those outside the Deaf community. Without doubt professionals should have a high level of sign language skill but we believe that the expectation that they should somehow simultaneously add an English element to BSL (by talking at the same time as signing) is of limited benefit. While it is possible for someone already thinking in English to use Signed English as a 'code' for the English language, it is not possible to *acquire* native fluency in English by this means – far too many words are either missed out all together or entirely mis-represented by inappropriate signs.

While it is important for hearing families to be able to access sign language classes should they wish to, realistically most do not become fluent language-level users of BSL as, just like any new language, it takes years of study. Most families use some signs as a way to support spoken **communication** within the home, and while this is obviously useful to a degree, it does not address the immediate **language** needs of the deaf child.

All deaf children need skills in English (or the spoken language of the wider community in which they live); additionally, deaf children born into hearing families need access to the language of their home. But how can early access to good quality English be possible for deaf children, particularly those born into hearing families?

Full, easy access to English

We believe that full and complete access to English is vital for Deaf children. They need English to communicate with hearing family and friends, to be literate, to reach their academic potential, and to compete in the job market.

If they are to have full understanding of English, deaf children and babies need **full** access to sentences like our earlier example: "Go and put your coat on, it is raining buckets outside so we need to give ourselves plenty of time to get there." Also, if they are born into a hearing family, they need to access such complex language at the same age as their hearing peers to prevent language delay.

This can be easily done even for children who get no benefit from hearing aids or cochlear implants, by using Cued Speech to make spoken language fully visually accessible. Cued Speech uses only eight handshapes in four positions near the mouth together with the lip-patterns of normal speech. Just as speech gives hearing children access to the language of English through sound, so Cued Speech gives access to the language of English through vision. A hearing family can learn this simple system in 20 hours or less; they cue as they speak. When they use Cued Speech consistently in every-day communication they are then ensuring their child has **early** access to the language of the home. This enables the child to fully develop a first language within the 4-year 'language acquisition window' that all children have.

Cued Speech can unlock just about any spoken language for deaf children, including ethnic minority languages and regional dialects. Spoken English is made up of only 44 'units of sound' which are used in different combinations to construct the tens of thousands of words that comprise the language. Cued Speech makes these 44 units visible so that deaf children can 'see' how words 'sound'. This means that a deaf child, just like a hearing child, can develop a (visual) memory of the sound-based units of speech and build language in the same way. Deaf children can **think** in English.

Spanish research has found:

Hearing parents can learn to cue at a rate and accuracy sufficient to deliver linguistically complex information to their deaf children within 2 to 3 months of learning the system. Cueing [using Cued Speech] provides children with access to complete language, including function words such as prepositions, often missed by deaf children from other communication backgrounds. (Torres, Moreno-Torres and Santana 2006).

The ability to think in English, or any spoken language, opens many doors; case studies and research from several countries has shown that deaf children from families who use Cued Speech are able to read and write as well as hearing children.

Deaf children whose parents and teachers cue (and/or who work with skilled transliterators) have been found to develop the written forms of spoken languages in ways similar to children of hearing parents. (Cornett 1990, Leybaert and Alegria 1993, Laybaert, Alegria, Foncke 1983, Perier, Charlier, Hage and Alegria 1988).

Dr Ruth Campbell, Ph.D, Professor Emeritus, Department of Cognitive, Perceptual and Brain Sciences, Division of Psychology and Language Sciences, University College London wrote in 'Cued Speech and Cued Language for Deaf and Hard of Hearing Children' (2010):

'The importance of Cued Speech is that it opens up the world of spoken language to the deaf child in a clear and simple way, from the outset....'

started in Belgium 20 years ago] has shown conclusively that children exposed consistently to Cued Speech gained and maintained a head start over deaf children of similar intelligence and skill who did not have Cued Speech.....

'Those who started using Cued Speech before school were even more likely to forge ahead, often with literacy levels and styles indistinguishable from hearing children.'

Expressive language

Through Cued Speech, deaf babies and children do not have to 'hear' the sounds of speech, they simply see a visual representation of them. Usually children exposed to Cued Speech grow up to use clear or understandable speech - especially if hearing aids or cochlear implants are also used. However, they do not have to reproduce the cued 'sounds' verbally; they can simply cue or, when brought up bilingually, may choose to sign their expressive language.

Cued Speech is not 'another language'; deaf children brought up with it do not need everyone around them to use it for the rest of their lives. Consistent input in the early years gives the child access to English at a language level; deaf children can absorb English this way at the same rate as hearing children. For day-to-day, repetitive communications **they may only need to see words cued occasionally from then on**. It will remain essential however for new words and to fully access education. Once deaf children fully understand English they can use this internal language to help lip-read people who do not cue, and vitally, to become fully literate and to continue to expand their own vocabulary.

Learning more than one spoken language.

Cued Speech has been adapted to represent more than 65 languages and dialects, and there are a number of case studies of cueing deaf children who use two or more spoken languages with native fluency. In theory there is no limit to the number of spoken languages a deaf child can learn if they are given access through Cued Speech. Cued Speech will also give deaf children access to the modern foreign language programme of their school.

What is the role of amplification?

Increasingly sophisticated amplification, including cochlear implants, support oral/aural approaches and Cued Speech has long been used effectively alongside these approaches. It has been shown that access to Cued Speech before and after implantation accelerates the child's ability to use the implant effectively (*Discourtieux, Groh, Rusterholz, Simoulin and Bustquet 1999...early and consistent access to Cued Speech pre-implantation provides a superior foundation for the acquisition of spoken language after implantation.*)

Amplification works best in a quiet environment where the child is able to focus on listening. Unfortunately, this does not always describe most classroom environments or indeed most households. Also, for some deaf children, amplification is impossible or insufficient. An implanted child is still a deaf child and outcomes vary.

The visual information given by Cued Speech has repeatedly been shown to be effective whether or not audition is possible. (*Fleetwood and Metzger 1997 ...there is reason to believe that this acoustic information may not be necessary for an individual to receive the full linguistic information conveyed via cueing.*)

Cued Speech will give a deaf child full access to the spoken word regardless of how much hearing a child has, or how good the listening the environment might be.

A comparison - literacy through speech, BSL or Cued Speech

Hearing children learn to read by bringing their knowledge of spoken English to the written form of English.

Two groups of deaf children can use the same skills as hearing children when they learn to read and write. These are:

1. deaf children whose hearing aid or cochlear implant gives them full access to spoken English – essentially they are functioning as hearing children.
- deaf children whose family has used Cued Speech to give them full, visual access to 'spoken' English. They learn to read by bringing their knowledge of cued English to the written form of English.

Deaf children who are taught to read through BSL must move between two different languages with very different grammar; a much more difficult task. Connie Mayer and Gordon Wells describe how very hard it is for deaf children to become fully literate through sign language in their paper '*Can the Linguistic Interdependence Theory Support A Bilingual-Bicultural Model of Literacy Education for Deaf Students?*'. They write: '*... proponents of bilingual-bicultural models of literacy education for deaf students claim that, if ASL is well established as the language 1 (L1), then literacy in English, language 2 (L2), can be achieved by means of reading and writing without exposure to English through either speech or English-based sign. In our opinion, this claim is based on a false analogy....*'

Models of good practise for deaf children in different circumstances:

Deaf children exposed to multiple languages by fluent models of those languages can develop both languages, and become bilingual in a fashion similar to hearing children (Earl 2006).

Cued Speech is a system which is used in various ways around the world. The following are brief overviews of some options.

- **Deaf babies born into hearing families.**

These are 90% of all deaf children and they need access to language from birth (or as early as possible) in order to develop a strong first language. The hearing people in this child's life could, fairly quickly, learn to cue their natural speech to communicate with their child, and also to let the deaf child 'oversee' their everyday communication. This would enable the deaf child to absorb and develop a strong first language in the same way as hearing children. Some families may need additional input to improve their general communication skills and/or additional input to help them use Cued Speech consistently. Access to BSL and the signing community is facilitated by Deaf adults who are able to fluently model the language and support its development at home and at school. The ways in which BSL support is given can be adapted according to the child, their age, family circumstances and current education.

- **School-age deaf children who already know some English (usually through Cued Speech use at home and/or amplification)**

Deaf children can benefit greatly by having a skilled Cued Speech Transliterater (a professional who encodes the speech of the teachers and peers into cued English and can voice-over for the deaf child if necessary). The Cued Speech Transliterater can give the child a full representation of the language of the classroom and work closely with the school to ensure the deaf child accesses the curriculum alongside the hearing children. Also 'Phonics' (learning the 44 sounds of speech and their spelling choices) is used by every primary school in Britain to teach literacy; Cued Speech corresponds exactly to this approach and will make phonics 100% accessible for deaf children.

- **Consistent use of both a sign language and a spoken language, clarified by Cued Speech, both at home and at school, in a recognised educational programme.**

A programme in Minnesota USA uses both ASL (American Sign Language) and English through Cued Speech to give separate access to both languages with considerable success.

The program tracks the English language development of its learners from the preschool level. These records show that performance on a standardised measure of receptive English vocabulary indicates **virtually 100% of learners achieve at least one year of gain per one year of instruction**. Some students make significantly larger gains of up to three years in one year. This can be compared to findings that, on average, it takes a deaf child five years to increase one year on a standardised reading test, (LaSasso 1999).

Kitri Larson Kyllö, the programme leader writes:

'As is evidenced by the ISD 917 [Intermediate School District 917] program, learners who are deaf are capable of developing the two very visually distinct languages and systems of ASL and Cued American English [American English through Cued Speech], just as hearing children are capable of developing two auditorily distinct spoken languages.'

For further information see *'Cued Speech and Cued Language for Deaf and Hard of Hearing Children'* edited by: Carol J. LaSasso, Kelly Lamar Crain, Jacqueline Leybaert. Plural Publishing (2010).

- **School-age deaf children who are learning English as a second language later in life**

Visually accessing English through Cued Speech will give these children a way to relate to spoken language both at the level of individual phonemes and also, vitally, at the whole word and language level. The languages may be delivered quite separately **or** through **'SignCueing'** (also known as language sandwiching), which is an effective means of blending signs from BSL with cued words to ensure every word in a spoken message is fully, appropriately and visually represented. It is a flexible approach that can be adapted to suit varied needs and situations.

Further information about very successful use of SignCueing at the Exeter Royal Academy for Deaf Education in Exeter, Devon *'Can Late and Limited Exposure to Cued Speech Impact the English Skills of Signing Deaf Pupils?'* - can be found in the appendix.

The differences between 'traditional' Sign Bilingualism and Compete Bilingualism with Cued Speech

When Cued Speech is used bilingually it differs from the more commonly accepted Sign Bilingualism both in aim and practice.

- **Sign Bilingualism** usually aims to give access to sign language as a first language and to spoken language such as English in its written form only.

Written language is taught through a sign language; e.g. written English is learned through BSL, a very different language.

- **Complete Bilingualism with Cued Speech** aims to give native-level understanding and use of two languages. One is a cued language (a 'spoken' language accessed

through Cued Speech) and one a signed language. Either can be the first language the child encounters, or both can be learned in the same time-frame.

Written language is taught directly through the child's 'first-language' understanding of the same cued language, e.g. written English is learnt through cued English; this is the same language but 'seen' rather than 'heard'.

To conclude

**British Sign Language is a 100% visible language.
Cued Speech makes the language of English 100% visible.**

We believe that **complete** access to both English and BSL is possible for all children and that it should be an **option** for all deaf children. Partial access to both or either language should not be acceptable in a bilingual model.

'Complete Bilingualism' for deaf children means:

- Fluency in English in all its richness when access is given visually through Cued Speech by competent users of English.
- Fluency in BSL in all its richness when access is given visually by competent users – these will usually be native users of BSL.

Deaf children deserve to have it all.

See the appendix for further information about:

- **Can Late and Limited Exposure to Cued Speech Impact the English Skills of Signing Deaf Pupils?**
- **Additional information, etc.**

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Appendix

Can Late and Limited Exposure to Cued Speech Impact the English Skills of Signing Deaf Pupils?

A report of work at Exeter Royal Academy of Deaf Education (ERADE)

Deaf children who are learning English as a second language later in life can also benefit from Cued Speech as a way to visually access English. Cueing will give them a way to relate to spoken language both at the level of individual phonemes and also, vitally, at the whole word and language level.

2007 / 8 - The aim of Cued Speech use at ERADE at this time was to improve phonics and literacy only; not to give whole-language access to English.

ERADE in-house research ('*Can Late and Limited Exposure to Cued Speech Impact the English Skills of Signing Deaf Pupils?*' Laura Gratton, 2007/8) on 6 signing pupils (5 with additional problems, some very significant) at Exeter Royal Academy for Deaf Education in Exeter, Devon found very significant improvement, **after between only 28 and 114 hours exposure** to Cued Speech over a nine month period.

Results included:

Phonetic Awareness improved by 2 years and 3 months overall and the average Phonetic Awareness Age improved by 44 months (one subject made a 6 year 5 month leap in 9 months).

Literacy improved by 6 months, with reading 3 by months and spelling by 6 months.

Lip-reading improved by 66%

Lip-pattern production improved by 40.1%

Throughout... it was reported that the pupils' confidence and attitude towards the English language had improved. As the pupils developed their knowledge of the Cued Speech system, their English skills improved in correlation...those with the most Cued Speech exposure developed the most.

2013/14 SignCueing or 'The Sandwich' as a strategy for becoming truly bilingual in BSL and English.

While the focus had mainly been on building the students' phonological awareness it is clear that this is only addressing one aspect of the students' challenge with literacy.

"Reading and writing processes are fundamentally rooted in the face to face form of the language. Language mediates literacy at the sublexical, lexical and syntactic levels."(Dickinson, Golinkoff and Hirsh-Pasek, 2010).

The deaf students at ERADE needed to acquire a functional comprehension of English at *language level* and the system of Cued Speech is designed to do just this. The term for Cued Speech used at a language level with English is 'cued English'.

The rationale for using cued English within a signing bilingual environment

While sign bilingualism supports the use of BSL as the main language of instruction to deliver a broad curriculum and thus develop positive deaf identities in the students, a major goal is still the development of literacy (Gregory, 1996; Mayer & Akamatsu, 1999; Schirmer, 2000; Easterbrooks, 2002; Knoors & Marschark, 2012). To do this, there needs to be a bridge between the students' primary language (L1), BSL, and the target language, in this case written English (L2) (Mayer & Wells, 1996; Mayer & Akamatsu, 1999; Goldin-Meadow & Mayberry, 2001; Mayer, 2007; Mayer, 2012).

We were aware that in French-speaking European countries a common and successful approach to teaching language to young deaf children is to represent a spoken or a written message visually, by a blending both signs and cued words together in one sentence. This approach is used particularly with pre-school children, where it is referred to as 'Language Sandwiching'.

We were also influenced by the work of Dodson (1972), who invented the sandwich procedure for teaching foreign language dialogues. Dodson argued that it gave the most direct form of access to meaning possible by using oral mother-tongue equivalents at sentence level to convey the meaning of unknown words or structures. Interference from the mother tongue would be avoided because the teacher would say each dialogue sentence twice, with the mother tongue version sandwiched between (Butzkamm, 2003).

Using the guidance that the conveyance of meaning should be in L1 with children who are acquiring L2 (Cook, 2001), when reviewing a piece of text with a student, BSL is used to provide the language, context and comprehension of the text and Cued Speech, delivered sequentially with BSL (or sandwiched between the BSL delivery), would represent the English.

The order of languages was variable:

Model 1: Strong BSL users who have had little or no input of cued English and/or where the focus is on comprehension

Language 1 (BSL) Language 2 (cued English) Language 3 (BSL)

The emphasis of this model is to use the strengths of L1 (BSL) to introduce L2 (cued English) sequentially.

As the students become more skilled with understanding Cued Speech and the text it represents, however, the BSL would diminish and cued English would increase. This example shows the importance of flexibility in the approach to each child based on their language progress in both L1 and L2. The next model shows how Cued Speech has become the route to English and BSL is used mainly just to ensure comprehension.

Model 2: Strong BSL users who are also strong cued English users with a focus on developing English skills

Language 1 (cued English) Language 2 (BSL) Language 3 (cued English)

When conversations are being held using BSL and cued English with students who are competent users of both languages, the last bit of the sandwich is often dropped to avoid the conversation becoming too laboured. People experienced in communicating with deaf children will be aware, however, when the student may need support or repetition.

SignCueing as part of a Reading Strategy for students at ERADE

The students had limited but growing skills in using BSL as an expressive language but none of them could add an English lip-pattern to their signs, although they did use some 'BSL lip-patterns' (for example their word for 'rain' is the sign 'rain' and the lip-pattern of blowing through their lips with varied strength to show how hard the rain is). They could not yet express a grammatically correct English sentence, but they did **want** to.

A program of learning was devised to give the students the chance to increase their understanding and skills in both BSL and English and to enable them to more skillfully discriminate between the two languages. They would be given a sentence in English, cued to them a word at a time and, if necessary, they would ask for a word to be broken down into phonemes so they could work out the appropriate spelling choices using the THRASS chart (Teaching Handwriting Reading and Spelling Skills phonics resource). The words were written up as they worked them out, and the meaning was discussed in BSL if the word was new to them. The students were then given three options: they could stand in one spot and represent the sentence in full grammatically correct BSL; they could stand in another spot and use Cued Speech to represent the grammar words in the sentence and sign the verbs and nouns or they could stand in the 'English' spot and cue the whole sentence. This process proved very interesting and brought up a lot of questions for staff and students, not least was the endless discussion of how very different the two languages are and how so many words in English do not have a direct representation in BSL. Once each student had made their attempts, then all the staff would go through the same process.

The students usually wanted to begin the process by standing in the BSL spot, but quickly found the ease of the 'blended' modes an effective way of expressing a full English sentence. **The most striking difference for every student was the immediate and unprompted use of English lip-patterns with every word once any cued words were added to the sentence** (NB: students were using lip-patterns rather than voice).

Outcomes

Within less than one half term, all **the students were choosing to miss out the interim stage of SignCueing and go straight to the fully cued version, thus showing they could accurately represent the message in the two distinct languages.** By going through the process of being able to use both signs and cued words together for a period of time, they were able to free themselves to improve their skills and understanding of both BSL and English.

Cued Speech is used primarily for these students as a receptive tool for lip-reading the English language. The fact that these students were already very comfortable with manually expressing language could be a reason for them being so keen to manually express English for themselves using Cued Speech. They were able to master cueing the grammar words very quickly and showed signs of being able to work out new words using these skills, for example taking the cued word 'that' and working out how to cue 'this' and 'them' or taking the cued word 'what' and working out how to cue 'when' 'where' 'why' and then learning how to cue 'who' with the /h/ phoneme and not /w/.

The use of English as a receptive and expressive language is of course exactly what precedes any literacy learning for hearing children. It is in the context of consistent exposure to cued English as a living language that deaf children can also acquire literacy skills.

Another interesting point is that staff who were in the process of acquiring skills in BSL and Cued Speech found the blended approach of cueing the simple grammar words (such as 'the' 'is' 'it' 'on' 'in' etc.) and signing the verbs and nouns a much easier way to quickly be able to visually express a message. It is, of course, all the grammar words that are 'left out' when anyone simply speaks English and signs at the same time (SSE). Because these words do not occur in BSL, there is no natural sign for them.

SignCueing also solved another problem common with novice signers - that many English words are misrepresented by using inappropriate signs. For example, using the sign for

'in' (that indicates 'going under or inside') in the context of 'See you **in** the morning' means that the speaker would actually be communicating 'See you **inside** the morning'. By replacing these inappropriate signs with cued words, the meaning cannot be corrupted and you have the added advantage that the word has been accurately represented phonetically. Every word in the English sentence can now be visually and appropriately communicated.

Cued Speech continues to be used effectively to reinforce the students' understanding of phonics. This was greatly facilitated by using the THRASS materials, and in 2014 Alan Davis of THRASS created a version of his phonics chart with the addition of cues and lip-patterns. The excellent visual representation of each of the phonemes with clear lip-patterns has been very beneficial and fits in perfectly with the students increasing understanding of the English language.

In summary, SignCueing is proving to be a very valuable tool in enabling these deaf students to '**take in**' (by lip-reading Cued Speech or reading print), **understand** (particularly with the addition of the THRASS materials) and **express** (by Signing and Cueing themselves) increasingly complex English.

Additional Information and Research about Cued Speech

90% of deaf children are born to hearing parents who have no ready way of communicating with their child. Hearing aids and cochlear implants can help but many of the 840 babies born with a significant hearing loss every year still cannot hear enough of what is said to make sense of it. Only about 35% of sounds produced can be accurately lipread. Whilst BSL is a recognised and expressive language, it is a totally different language from English and takes several years to learn.

This means that:

- Many of the two babies born deaf each day cannot access or understand the language of the home, becoming needlessly isolated, with an estimated 81% of deaf children unable to fully communicate with their parent(s)¹. With approximately 67% of deaf children feeling neglected in their class, the ramifications of stunted communication has been shown to affect scholastic achievement². Research has highlighted the home learning environment as the single most important behavioural factor influencing children's outcomes at age 3 and 5³. Problems with early communication and socialisation within the family often develop into emotional, behavioural and adjustment disorders, with consequent poor academic achievement and under-employment. A deaf person is 2.5 times more likely to be unemployed than a hearing person⁴.
- Without enough understanding of spoken language, deaf children are also unable to become fully literate, vastly reducing their ability to achieve at school and beyond. Most deaf children leave mainstream school at 16 with a reading age of 9⁵. A government funded study in 1999 concluded insufficient data to support that these figures had or were significantly improving⁶, and thus, sadly, adults with low literacy are less likely to be in good health, working, in a stable relationship, skilled, or involved in community life⁷.

Cued Speech can solve these problems. The system consists of a simple combination of eight handshapes in four positions around the mouth, together with the lipshapes of normal speech, to give full and unambiguous access to spoken language.

Research shows with Cued Speech, lipreading levels increase from around 35% to as much as 96%⁸. Thus, it enables deaf children to access and understand complete spoken language through vision – in a similar way and at the same speed as hearing children. Not only does this mean that full communication is possible in the home, but also that the child can then think in English and use this internal language to learn to read and write. Research also shows that deaf children brought up with Cued Speech achieve reading scores equivalent to hearing children⁹ and that deaf adults brought up with cueing parents found high levels of self-esteem and self-confidence which they credited to Cued Speech; the vast majority felt they were always included in family conversations and activities¹⁰.

Cued Speech has been adapted into 65 languages and dialects, which is particularly useful for people whose first language is not English to enable them to communicate with their deaf children in their own language and in English.

With a complete understanding of English and full literacy, deaf children can grow up to play a full part in the family and society, reach their educational potential and compete more equally in the job market. It is no exaggeration to say that the use of Cued Speech can completely transform the lives of deaf children. It can be learnt in 20 hours at a net cost to the Cued Speech Association UK of under £400 per person, and we teach around 200

people to cue each year. In contrast, the cost of low literacy **alone** is estimated to be £64,000 in one person's lifetime¹¹. The social and economic payback of Cued Speech use is incalculable.

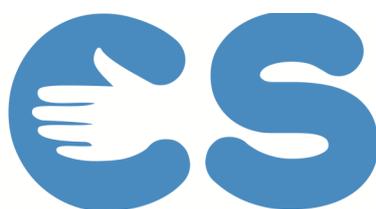
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For further reading see:

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The Cued Speech Association UK (CSAUK)

is a national registered charity run by parent and professional users of Cued Speech which provides **information about** and **training in** Cued Speech.

Our aim is to give deaf and hearing impaired babies, children and adults

full access to English through Cued Speech so that they can acquire the communication and literacy Skills they need to reach their potential.

Maximizing impact - For greatest impact we focus on providing information and training to parents and teachers who can then use Cued Speech to give deaf children day-to-day access to English.

We provide adaptable and affordable training through:

- face-to-face sessions for individuals or groups - both families and professionals.
- one-to-one or group training sessions through 'Skype' - which are adaptable, personalised, immediate, very effective and economical.
- our e-learning website, which is free to use and is complemented by use of our e-learning handbook.
- an annual cue camp.

We fundraise to provide support for parents who can't afford the costs of training.

For training and more information about the use of Cued Speech, contact:

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