First things first
Do not attempt to work on lateral s or lateral z unless the alveolar stops /t/ and /d/ are correct.

Demonstrate the correct tongue position for /s/, model the sound, and see if the child can imitate. You might get lucky!

"Discuss" what you do when you make /s/ and compare it with what the child is doing.

Make sure the child knows, in simple terms, what you are working together to achieve.

Do not use the procedure with children under four years of age.

The Butterfly Procedure

'ee' as in 'peep' or 'i' as in 'pip'
Talk about the Butterfly Position for the tongue, or the position the tongue is in when you prolong the "i" in "pip" or the "ee" in "peep". Point out to the child that the lateral margins of the tongue are in contact with the teeth: like a butterfly with its wings up. Older children sometimes like and are amused by the imagery of a butterfly assuming the "brace position".

On the edge
Draw the client's attention to the way the tongue edges (wings) press quite firmly on their teeth. You might mention that "floppy edges" or "floppy wings" let the air out sideways, while "strong edges" or "strong wings" do not.

Groove
Help the child to imagine the midline of the tongue as the butterfly's body, visualising the groove that forms along its centre.

Straight shooting
Tell them the groove is there for them to "shoot" the air down, straight out in front! It is there especially to guide the air in the right direction for a super sounding ess. Use your hands to convey the idea of "wings up", "wings firmly tucked in against the teeth", and language such as, "a nice little groove where the butterfly's body sits", and a "straight shot" of air. Employ imagery to talk about "shooting straight" and "shooting sideways".

Traditional
The butterfly procedure is firmly rooted in the principles of Traditional Articulation Therapy. It is suitable to use with children with children 4 years and over, and adults.

Self-monitoring
Early in therapy children must be taught the ability to hear the error-sound, in this case the lateral /s/, when the
therapist produces it. Later in therapy they need to be able to recognise the lateral-s when they produce it themselves. In other words, they must be able to listen critically, first to the speech of another person, and subsequently, to their own speech. Such self-monitoring can be learned at a very early age.

**Focused Auditory Input**
"Auditory training", or focused auditory input can be a powerful adjunct to direct work on eliciting the target sound and then producing it in increasingly challenging speech contexts.

**Oral Motor Therapy & Oral Motor Tools and Toys**
There is no need for Oral Motor Exercises (e.g., sucking and blowing exercises, drinking thick-shakes through straws, etc), oral motor tools (e.g., horns, straws, etc) or oral motor toys (e.g., toy whistles, trumpets, etc) in treating functional speech disorders, developmental phonological disorders or developmental apraxia of speech.

**Ten Easy (we hope!) Steps**

Typically, therapy proceeds in a series of steps. Allow the child not to feel rushed, and give him or her time to master each step before proceeding to the next. Slow and steady (usually) wins the race! There is no "correct speed" that any of this should happen. Every child is individual, and of course, that is why very rigid home programs that prescribe activities for week 1, week 2, week 3 and so forth, can be so unrealistic, and worrying for those who attempt to administer them without the professional supervision of a speech-language pathologist.

**Step 1**
Model /t/ and have the child imitate your production. Do the same with /t-t/, then /t-t-t/ and then /t-t-t-t/. If the child is producing a schwa or other vowel between the consonants, eliminate it if possible. Aim for a "pure" sounding sequence of consonants.

If the child "needs" a vowel to get from one /t/ to the next use "i" as in "pip" (ti- ti- ti- ...) ) or "ee" as in "peep" (tee- tee- tee- ...). Some SLPs prefer "ee" because it creates a firmer "seal" between the tongue margins and the teeth, and, potentially anyway, this discourages lateral air-flow.

**Step 2**
Increase the rate at which the child repeats /t-t-t-t/. Notice the subtle /s/ that starts occurring between the t's. Point this out to the child in your speech and in his/her speech. The sequence is now starting to sound like /ts-ts-ts-ts/.

**Step 3**
The child will probably be unaware at this stage that the little "under-articulated" /s/ is there. In this step, tell the child to produce the /t/ and to let a little air come out at the end of the sound. Demonstrate what you mean, without actually instructing the child to produce "t and then s". Just emphasise that you want to have "air happening" after the /t/. Gradually "sharpen" the /ts/ thus produced, so that it becomes obvious that there are two sounds, /t/ and /s/, being articulated clearly. Once it's perfect, have the child practice saying /ts/ until they can do it very easily. It is a good idea to stay on this level for several days.

**Step 4**
Now it is time to put the /ts/ combination into real words. Again using the vowels "ee" as in "feet" or "i" as in "fit" to facilitate correct placement, present the child with a practice list. For example, "He eats meat, She eats candy, It eats grain, etc.; or, "It's a boy, it's a man, it's a cow, etc. or, "It's good, it's bad, it's tall, etc. In making up the phrases or sentences, do not include other words containing /s/ or /z/. This means don't have items such as "He eats pasta" or "It's a zoo" or "It's silly".

**Step 5**
Being careful not to rush, give the child other /ts/ words, IN SIMPLE SENTENCES, WITHOUT OTHER S-WORDS, to practice saying (in the speech clinic and at home) in short practice sessions of 5 to 7 minutes, once, twice or three times daily. The practice periods can be separated by as little as five minutes. When it comes to
homework some families find it easier to do a sequence such as this: practice-1 - read a story - practice-2 - read another story - practice-3 - read a story.

Words might include: bits boats cats dates fights gates goats hates hats jets kites lights mitts nits warts.

Try to put the /ts/ word at the end of the phrases or sentences, to make it easier for the child. For example, many lights, many kites, many fights, many jets, many mitts, etc; or, the men are in the boats, the sheep are in the boats, the fish are in the boats, the deer are in the boats, etc.

**Step 6**
By now the /s/ the child is producing should sound clear and "adult-like", and ready to separate from the /t/. Without mentioning the tongue too often, instruct the child to "say ts without moving the tongue, and then add an ess, like this: /ts-s/. This may be difficult for the child at first, so take it slowly and quietly and give plenty of support and encouragement.

**Step 7**
Determine whether producing /s/ SFWF (after a vowel) is easier for the child, or whether producing /s/ as the first sound in a consonant cluster is easier.

Children vary with regard to this, with some children finding /s/ before a consonant, in a consonant cluster such as /sp/, easier to say. If the child can ONLY manage /s/ in clusters, start with /st/, thereby building directly on what has already been achieved.

Production practice words might include:

/s/ SFWF: ace bus case dice face guess hiss Jess Kiss loose mouse nice piece race toss worse yes us ice ace pass piece yes

/st/ SIWI: steam stick stay stairs steps stag star stop stamp stone stork stoop sty stir stool

The abbreviations SIWI, SFWF, SIWW, etc are explained [here](#). There are word lists [here](#).

**Step 8**
Provide practice with all s-clusters SIWI. Do not include three-consonant combinations such as /str/ and /spr/ unless the child achieves quick success with them.

Use practice words such as skin, scared, slime, spot, smile, snail, etc.

In the same step, introduce st- and ts- clusters SIWW, with production practice words such as master, Betsy, instant, etc.

**Step 9**
Producing /s/ in the SIWI position may be the hardest step for the child (depending on the particular child, of course), but it should happen smoothly if the preceding steps have been mastered. Practice words might include:

/s/ SIWI: seal sit seat sock seed sum sick sun sing suit sail sew same soap sell soak sack sold sad salt sip sauce sink saw sea sort sword side Sam-I-Am Celeste

**Step 10**
Move on to /s/ SIWW using words such as: messy fussy inside recent sausage guessing
Individualizing the program and tailoring it to the particular child's needs, follow a traditional therapy hierarchy of activities in order to complete the process of eliminating lateral /s/ (or palatal /s/) and establishing standard production. Additional work on the voiced cognate /z/ may or may not be required, depending on the child.

/s/ and /z/ pictures
2 pages
/s/ SIWI
CLICK HERE FOR PICTURES AND WORDS FOR
seal, seat, sun, sack, sold, sight, sip, sails, sip, C, sell, saw, sit, sole, sign, sound, soot, socks, site, six, sauce, seed, sore, sunny, sort, cell, sum, sing, suit, sew, sad, soap, soak, salt, sink, sea, sword, sigh, seven, surf, same, sell, safe, sieve, sand, seagull, city, seaweed, singlet, sardines, saddle, sailor, soccer, surprise, seahorse, singer, circus, sandal, CD's, sofa, salad, celery, suitcase, sick

2 pages
/s/ SFWF
CLICK HERE FOR PICTURES AND WORDS FOR
bus, purse, gas, goose, face, nurse, horse, juice, house, case, us, ass, race, rice, kiss, yes, nice, mice, octopus, guess, ice, fuss, dice, Bess, Gus, hiss, ace, mouse, cross, S, peace, chess, glass, mess, plus, grass, sauce, dress, space, voice

2 pages
/z/ SIWI, SFWF
CLICK HERE FOR PICTURES AND WORDS FOR
zoo, zebra, zero, zip, zoom, zinnia, zither, z, Zach, Zoë, zap, zone; knees, buzz, eyes, sneeze, cheers, chews, nose, boys, cheese, bees, shoes, pies, prize, rose, stars, wise, jazz, trees, hose, peas, cars, please, keys, choose

5 pages
/s/ + stop Clusters
CLICK HERE FOR WORDS AND PICTURES FOR
top stop, tool stool, talk stork, team steam, take stake, tack stack, tar star, tick stick, pie spy, pit spit, peach speech, pin spin, pot spot, pill spill, cat scat, car scar, core score, cool school, key ski, soup stoop, seal steel, sack stack, sick stick, sip skip, sails scales, "C" ski, sore score, scoop stoop, school stool, scar star, sky sty, score store, scamp stamp, beet Beast, Bert burst, wet west, coat coast, goat ghost, wait waist, net nest, pet pest, feet feast, vet vest

11 pages
/s/ Clusters SIWI
ACKNOWLEDGEMENT - SHEILA DRUMMOND

I first heard the term "butterfly position" as a speech therapy student in 1967 from an inspirational Melbourne speech pathologist, Sheila Drummond AO (1915-2006). She did not claim to have "invented" the term or the procedure for working on lateral fricatives and affricates, and she may have heard it from someone else. I came up with up with the name "aspiration trick" in the 1980s but the technique itself had been around for much longer. I heard about it first from Mrs Drummond, in the 1960s - she called it h-insertion.

Page updated 26 Aug 2011