BISCREPTAL learners need targeted work on three aspects of word-level English: Sounds, Handwriting and Vocabulary/Meaning.

- This is the FIRST of TWO presentations on BISCREPTAL LEARNERS OF ENGLISH, and it focuses on SOUNDS.
- There is some overlap (regarding writing systems) with the SECOND presentation on Handwriting and Vocabulary.

PHONEMIC AWARENESS is often the "missing piece" when students display halting reading.

PHONEMIC AWARENESS precedes PHONICS. This presentation will extend into Phonics.

[The term, “phonological awareness” is an umbrella term the whole ‘world’ of sounds in English language teaching.]

IMAGE:
http://www.rgbstock.com/bigphoto/mmImDGC/Puzzle
Everything that we do with language(s) involves creating and using neural pathways. Reading a new script will definitely involve new neural connections – even different regions of the brain.
It is a “big deal” for the brain to take on a new script – it is just as significant as learning to read in one’s first language.

Reading is not a “natural” human activity – we need to be taught to read.

IMAGE:
http://multilinguals.wordpress.com
This map from Wikipedia clearly shows the broad swathe of countries that use non-Latin alphabets. **This is where MOST of the current learners of English are based.**

[North and South America have pockets of syllabaries – Inuit and Cherokee - but otherwise, they are overwhelmingly “Latin alphabet” users.]

1. The ARABIC family of scripts are called *ABJADS* – they are a type of alphabet that emphasises consonants – vowels can be indicated by diacritics, but usually are not. (This group includes Persian, Hebrew and Urdu.)
2. The INDIAN family of scripts are called *ABUGIDAS* – scripts that are based on (usually) consonant-dominated syllables. These include Thai and some other scripts in SE Asia, such as Balinese. This group also includes Ge’ez, an Ethiopic script.
3. Chinese scripts have many labels – “logographic” is inadequate – a better term is *MORPHOSYLLABIC*, as each character represents a syllable and a unit of meaning.
4. Japan uses a *mixture* of three scripts: some of the Chinese script (Kanji), and two syllabaries (one for borrowed words and one for grammatical words).
5. Korea has its own unique script, *Hangul*, based on blocks of 2-5 letters that represent syllables.
6. To the north and north-west are the Cyrillic alphabets and other alphabet-type scripts.
7. A close look at the map reveals pockets of other scripts, many of which have been developed locally (often by missionaries).

Here are some of the many ways in which different scripts can operate.

**Each script sets up ‘expectations’ in the minds of its readers.
[We do the same thing when we erroneously refer to “letters” and “words” in other scripts.]**

Learning a new script is a very significant cognitive challenge – far more than we probably realise.

IMAGE: P.Bunce
1. Arabic consonants change their form, depending on whether they are at the beginning, middle or end of a word. They are different again when single.
2. Bengali is an ABUGIDA – these are consonant-strong syllables. Look at how the vowel sounds move around.
3. Burmese, also an abugida, wraps sounds around each other.
4. Tamil – here are 7 different ways that the /u/ sound is attached to the dominant consonant.

And – we think that learning to write English is difficult!

IMAGES: http://scripts.sil.org
(there are some animations on this website that show the formation of these scripts)
(these are ‘stills’ from those animations)
What is a “word”? It is actually quite difficult to define. Their separation by spaces is important in English. Spaces – may or may not be used in similar fashion in other scripts. Thai and Khmer use them sparingly – at sentence ends and around numbers (Khmer).

All of these scripts carry the same text – Article 1 of the UN Declaration of Human Rights.
In English, it has two sentences:  
*All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.*

IMAGES: www.omniglot.com
(this huge website has this same text written in almost every known script)
• Most Chinese characters are combination of two elements (compounds), some are single characters.
• The two elements provide suggestions (only) of semantics (meaning) and phonetics (sounds). They are combined in different ways.
• Each is based on a square shape, representing ONE SYLLABLE with meaning.
• Each character has a particular stroke order (the one provided says “love”) that must be learned.
• All characters fit inside a sub-divided square. This affects the “saccade width” of Chinese readers’ gaze as they scan across a line of text.
• Direction: now mostly R to L, but vertical is still used, especially for literature.
• Simplified and Traditional: sometimes hard to see the “simplification”! The PRC and Singapore use Simplified. Taiwan, HK and overseas communities use Traditional.
• STROKE ORDER – this may affect the order in which alphabet-letters are written (e.g. the letter ‘t’ is often drawn crossbar first by Chinese learners of English)*

*An excellent reference on such transfers of scriptal characteristics is: Rosemary Sassoon’s "The Acquisition of a Second Writing System" (1995, Oxford: Intellect) (This is still the ONLY practical book on aspects of teaching and learning a new scriptal system!)

What a sentence! This one has all three scripts together (plus Arabic numerals)

Two syllabaries: Katakana for borrowed/foreign words and Hiragana for grammatical words
Kanji: borrowed Chinese characters

There may also be some use of words written in the English alphabet, e.g. brand names.

SOURCE: on the graphic
IMAGE:
There’s a lot to learn – not so much to unlearn, but to CONNECT the older learning with the new learning. Connections may not be readily made, as the two scripts may involve very different neural pathways. Learners need time to accommodate BOTH scripts.

“Retrieval” from memory may be performed quite differently – it can be visual, sound-based or kinesthetic. Hong Kong Cantonese-speakers often write characters on their palms with their fingers, when double-checking with another person the correct way to write unfamiliar characters.

With bisscriptal readers of English, it is no longer correct to claim that “we only learn to read once” (Saville-Troike, 1976) or that reading skills can “easily transfer across languages” (Cummins, 2000). Those claims refer to the learning of same-scripted languages, and were made in an era in which other-scripted learners were not so common in English classes.

Knowing one script does, however, establish the broad notion of **literacy** – that scripts represent spoken language.

By definition, “bisscriptal learners” are already literate in another language.
Teaching someone to read – after they have already learned to read – is NOT the same as teaching a total beginner (i.e. a child or a non-literate adult). BISRIPTAL learners know what print is all about. BUT – their vocabulary is minimal – and this is a priority area – vocabulary growth.

- Beware of using primary school resources designed for native-speaking youngsters – they might be good, but they ASSUME vocabulary – and they rely on this in the many, many "rhyming activities" and picture-recognition activities that they rely on.
- Rhyming is not possible (spontaneously) in a new language. Rhyming in a new language is incredibly difficult!
- These materials often assume knowledge of the names of countless everyday objects.
- Plus – they are very ‘young’ in their approach. Most biscriptal learners are at least upper-primary level in age.

Make judicious use of first-language materials. There are many useful ideas there – just be wary of their assumptions.
Some educators write about the 5 “pillars” of English – PA, phonics, fluency, vocabulary and comprehension. The acquisition of these skills may not follow in quite the same way for new language learners. Young first-language learners will enjoy (and comprehend) most stories that are read to them. BUT - new learners of English need to have a store of vocabulary before they can easily comprehend what others read to them. The native-speaker have a huge head-start with comprehension. Their short-term memories are not burdened with masses of new vocabulary.

**PA** – is the absolute foundation skill of reading – until learners can HEAR all the tiny sounds in English – they will have no chance of learning to record them (spelling) or see them represented in text (reading). PA is a LISTENING SKILL. Once learners have mastered this fine discrimination, they will be ready for SOUND-LETTER connections – or “Phonics” (text-dependent skills).

**Phonics** helps learners to find their way through all the many ways of representing the 44 sounds of English. Once they can “sound out” words on a line – they will be able to read aloud with FLUENCY – with smoothness and injections of mood. This will continue to develop for many years.

Climbing this pyramid will take 6-7 years. The top represents FULL comprehension of academic texts. Note – vocabulary growth is building all the way through.

BICS = Basic Interpersonal Communication Skills. CALP = Cognitive, Academic Language Proficiency

IMAGE: P.Bunce
PA involves aural/oral skills. Can learners HEAR the tiniest of sounds? Sometimes, even native-speakers need to double-check what someone has said!

MEANINGS can change markedly in English, with just a few changes in phonemes.

We can make “slips of the tongue” when speaking – and also mis-hear what someone has said in noisy situations.

Those tiny sounds are CRUCIAL, and learners need to be “tuned in” to them. This is PHONEMIC AWARENESS.
PA is a very strong predictor of future reading success. Hearing every tiny sound in every word is essential in spelling (encoding) and reading (decoding).

*Going “inside” syllables is difficult for most bisecondal learners – as most of them have come from syllabic-level writing systems.

Chinese and other syllabic-background learners may have significant difficulty in hearing these tiny differences – and may even dismiss them as trivial – but they need to persist, as they will not want to risk embarrassment at making ‘obvious mistakes’. Remind them that this can happen in any language. English is full of these “traps” too.

Most Chinese syllables are open-ended. Hearing (and making) final consonants is a challenge for Chinese speakers. If there is a cluster of consonants at the end of a syllable, this can also pose additional difficulty. In English words, endings are where a lot of the grammatical indicators occur (plurals, verb endings, noun suffixes).
[This was animated in the presentation. All Qs were presented verbally BEFORE being displayed on the screen.]

One-by-one, the audience was asked these Q’s. The Qs began with syllables and went “down” to the level of phonemes within blends.

As fluent readers of English, we are often “blinded” by what we know about the spelling of words. Sometimes, we over-reach ourselves, e.g. some people try to say every sound in the words, Wednesday, or library. We know that there is a letter L in “walk”, when there is no /l/ sound.

In the presentation, the only word that “caught out” a few people was BOX. The letter X represents 2 sounds: /k/ and /s/. 
Here is a step-by-step Phonemic Awareness Programme. **ALL ORAL/aural.**

It’s useful to have a “stock” of words ( multisyllabic and single-syllabled)  to use in all work with sounds. Use the students’ names, Australian cities, classroom vocabulary, recent words etc.

Learners don’t have to know the meaning of the words – they can still hear/count the syllables – BLAH, BLAH, BLAH.

**IMAGE:** a still from an animation available at: http://www.learninggamesforkids.com/vocabulary-games/syllables/syllable-lesson.html
ALL ORAL/AURAL.
It’s useful to have lists of single-syllable words with the sounds in initial, medial and final positions. These can be found on “articulation” / speech therapy web-pages. (see below) Minimal pair lists are also easily found on the internet. (see below)

Onset-rime work is also valuable. The 37 most common rimes in small English words are:
-ack, -all, -ain, -ake, -ale, -ame, -an, -ank, -ap, -ash, -at, -ate, -aw, -ay, -eat, -ell, -est, -ice, -ick, -ide, -ight, -ill, -in, -ine, -ing, -ink, -ip, -ir, -ock, -oke, -op, -or, -ore, -uck, ug, ump, -unk

****When adding consonants willy-nilly, be aware that some of the “words” you make might be inappropriate …

INTERNET SOURCES:
http://www.home-speech-home.com/minimal-pairs.html
3,800 minimal pairs – used by speech therapists
http://myweb.tiscali.co.uk/wordscape/wordlist/minimal.html
Two huge charts of minimal pairs, contrasting every sound against every other
http://www.mrsjudyaraujo.com/rimes-for-decoding-and-spelling/
A Chart of 200+ rimes
http://www.home-speech-home.com/speech-therapy-word-lists.html
Excellent lists of sounds in all positions in words
ALL ORAL/AURAL WORK.
Again, a list of single-syllabled words is useful. Stretching and blending. We can “concertina” short words – stretching some ourselves and asking learners to stretch others.

Longer words – can wait until PHONICS instruction, when students can take words apart, syllable-by-syllable.

No one should be too “shy” to use their fingers in sound-work. They are really useful. Use them yourself.

IMAGE:
free clip art from: http://www.dreamstime.com
ALL ORAL/AURAL WORK.
This is a difficult skill, but a very important transition-to-phonics skill. It will need to continue, well into the phonics work. This is where PA and Phonics overlap. Even if the words are unknown (or non-words), learners should still be able to distinguish individual sounds. This is quite difficult with the second-half of consonant blends.

4. MANIPULATING SOUNDS (more difficult)
Can learners ‘cut off’ and ‘switch’ the sounds in words?

Initial: In the word ‘mat’, change /m/ to /s/.
Final: In the word ‘mat’, change /t/ to /p/.
Medial: In the word ‘mat’, change /a/ to /i/.

Can learners ‘cut off’ parts of blends?
Say ‘step’ without the /s/.
Say ‘best’ without the /t/.
Say ‘frog’ without the /r/.

TEST: Can learners hear, ‘cut off’ and switch sounds?
Step Two in reading English => Phonics.
[No time today to give more than a “taste” of phonics.]

“Phonics” can mean different things to different people. Choose your programme resources wisely.
DO NOT USE ANY PROGRAMME THAT SUGGESTS JUST 26 SOUNDS!
ALSO - Be wary of USA materials – their vowels sound quite different, e.g. “caught” and “cot” sound the same, “water” is “wah-ter”, not “wor-ter”.

PHONICS INSTRUCTION has a sequence of its own:
Consonants > consonants and short vowels > consonant digraphs and blends > longer vowels > diphthongs

Even young L1 children have difficulty with /th/ and some blends.
From here onwards, we proceed on multiple fronts – more PA, vocab. work, simple texts, phonics elements …
Phonics Instruction moves forward on multiple fronts. It is not as easy to ‘control’ as Phonemic Awareness work.

There does need to be a SEQUENCE of topics – but this will be mixed up with “incidental”s that are not yet covered in the sequence. We cannot ‘quarantine’ the words that students will meet and need.
PHONICS INSTRUCTION MOVES FROM AN EMPHASIS ON CONSONANTS TO A FOCUS ON VOWELS.
But – nothing can be quarantined. This is the “ideal sequence” – and the one that should be followed in a series of regular, ‘formal’ phonics mini-lessons.

A CHART
All learners benefit from seeing “the big picture” – biscriptal learners especially. As they start to discover that English spelling appears to have almost “endless” alternatives, it is reassuring to know that there is a FINITE SET of 44 SOUNDS. They will always be able to find the sounds of the words they meet on the CHART – somewhere.

TERMS
Use the proper terms such as: phoneme, grapheme, digraph and blend.
HERE IS THE BIG PICTURE.
There are a few such Phonics Charts – THRASS has a range of charts, and Phonics International (UK) has some good ones.
AMES has two charts – one with consonants, one with vowels.
*This is one that I have drawn up. It is free for anyone who’d like to use it. (It may still have some ‘bugs’, however.)
It is available for downloading as a PDF document at: www.alphabetheadaches.com (presentations & publications page)

Such charts may look big, but each one has the COMPLETE set of 44 sounds and some key words.
*Provide students with a copy of the chart. Refer to it often. ADD to it when new spelling-choices are found.
(such charts can be printed at A4 size and laminated)

IPA SYMBOLS?
Students will meet them soon enough – in dictionaries – and learn to ‘decode’ them in time, using key words. I do NOT recommend them for everyday use, because they involve ANOTHER ALPHABET and can be quite counter-intuitive. (My Hong Kong students absolutely hated them!)

INTERNET:  http://www.alphabeticcodecharts.com/free_charts.html
Free charts from Debbie Hepplewhite, UK
CONSONANT SOUNDS are the easiest place to start, because they are quite predictable.
CONSONANTS are made by restricting the flow of air in the mouth in some way.
(Vowel sounds are made with the mouth open.)

1. VOICED AND VOICELESS PAIRS
Students could feel their throats as they say these pairs.
Or – place a sheet of paper in front of their mouths and watch it “puff out” with the voiceless sounds.
**DO NOT VOICE** the voiceless! If you say “puh” or “buh” you have made a syllable – not a phoneme.
Say every sound in a short, sharp snap.
Present the sounds – and the main LETTERS that represent them. Try adding some rimes (or phonograms).
**B/bd these letters and rimes. Mix and match.**

**RIMES** – are the second part of syllables
**ONSETS** – are the opening consonants in syllables
(e.g. st-op; qu-ick; fl-ag; l-ong; p-et etc.)

Some of these pairs may be difficult distinctions to hear/make for some learners. They will come to know them as “old friends”.

<table>
<thead>
<tr>
<th>Sounds</th>
<th>Letters</th>
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</thead>
<tbody>
<tr>
<td>/b/ - /p/</td>
<td>b p</td>
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<tr>
<td>/v/ - /f/</td>
<td>v f</td>
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<td>/zh/- /sh/</td>
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<tr>
<td>/j/- /ch/</td>
<td>j ch</td>
</tr>
<tr>
<td>/g/- /k/</td>
<td>g c/k</td>
</tr>
</tbody>
</table>
2. The remaining consonant sounds.

/h/ is voiceless, /m/ /n/ and /ng/ are ‘nasal’

When two letters represent just one sound – these are called **DIGRAPHS**.

* Look for them in words that students already know.

**HOW MANY LETTERS? HOW MANY SOUNDS?**

*** Analyse lots and lots of words.

**H.M. PHONEMES? H. M. GRAPHEMES?**
3. CONSONANT BLENDS – look for these in known words – They have TWO sounds.
They are often found at the beginnings and ends of syllables. They may be difficult for open-syllable speakers to hear and make. Make lists – how many do students know? Add some rimes. Take time to work through as many as possible.

NONSENSE WORDS – don’t be restricted to ‘real words’. Anything constructed to resemble a real word can be pronounced in English. As students move into advanced vocabulary, what might appear to be ‘nonsense’ might be the name of a chemical or a medicine. It might be the Latin name of a species. Chinese-background students may resist the very notion of ‘non-words’ or made-up words, as they do not exist in their script. In the UK, there is a very important Year One ‘Phonics Screening Test’ that uses a mix of real and pseudowords to test students’ phonics skills. Pseudowords make great test items, as they can’t be memorised words. They must be ‘decoded’ on-the-spot.

Longest single-syllabled word = ‘strengths’. 7 phonemes and 9 letters. Longest one-syllabled boy’s name = Vaughan. 3 phonemes and 7 letters.
4. Vowel sounds and their spelling options will take YEARS to complete. But – there are common spellings. Students love “final e” – it’s rarely wrong. Look at the unusual spellings that are now appearing as we dig deeper into vowels. USE A WALLCHART (A.M.E.S. or THRASS) – or a printed list – to refer to the most common spellings.

Make a fuss of “new spellings” for any sounds.

MINIMAL PAIRS – there are lots on the internet – when you say them, your “tone” must be identical – as you will have ‘tonal learners’ in the class who might think that a ’rising’ or ‘falling’ tone is important. TRY THIS – pretend that each pair has a THIRD member – but you stop short of saying it. THAT will keep the main two on the same ‘tone’.

By now, learners should have become WORD ANALYSTS, noticing the range of spellings for some sounds. They should be starting to notice unusual ways to spell sounds.
5. DIPHTHONGS ARE A KIND OF LONG VOWEL SOUND — not all students will need to learn this word — or even what they are — but some will enjoy the analysis. Diphthongs involve a ‘sliding’ from one vowel sound into another — there are 8 diphthongs. They have a range of spelling choices as well. (On my chart, they are the final 8.) Use a ‘wavy’ hand motion to draw attention to the slide/wobble/glide within these sounds. Diphthongs can be found in simple and complex words, e.g. toy, say, by, now, go, cure, fear and hair.

WORD WORK NOTEBOOK — students should maintain a notebook with aspects of vocabulary, spelling, sounds, handwriting etc. They will keep it for a long time!
SOME CLASSROOM IDEAS
Read aloud to students often. Sometimes ask them to read the same sentences along with you, back to you. Re-read passages. Patterns. Patterns. Patterns.

WORDS – tell us all about themselves – LOOK INSIDE WORDS AS OFTEN AS YOU CAN.

If you are doing other things – “stockpile” words that you have referred to briefly in one lesson – and revisit them in another lesson.

Keep a spot on the board for interesting words. Record words and word analysis in WORD WORK NOTEBOOKS.

PLANNED MINI-LESSONS
TEACHABLE MOMENTS
STOCKPILE WORDS FOR LATER

Some suggested activities
(Have some word lists on hand)
- Rime activities, -in, -an ...
- Key words, minimal pairs
- First, middle or end sound?
- Count syllables and sounds
- Same-different, odd-man-out
- Find words on the page with target letters/sounds
- Always b/bd words
- Noughts and Crosses – 2 sounds – say a word with it before writing your letter(s)
- Accept common ‘sight words’

- “I spy” – pictures, room – words with ‘target’ sounds/letters in them
- Read aloud, students join in
- Alliteration – Kevin from Kalgoorlie likes kangaroos
- B/bd: What will happen if I change these letters like this?
- Similar spelling in other words?
- Be ever-alert to patterns.
  * Planned mini-lessons
  * Teachable moments
  * Stockpile words for later
PHONICS NEVER ENDS.
Students will need these skills to decode and encode the vocabulary in their academic courses.

The way forward moves on multiple fronts.
There needs to be a regular, instructional SEQUENCE of topics – but this will be mixed up with “incidentals” that are not yet covered in the sequence.

PHONICS work will overlap with HANDWRITING skills and work on VOCABULARY-BUILDING (morphological awareness).
* This is covered in the second presentation on BISSCRIPTAL LEARNERS.
Thank you – hoping that the “missing pieces” can now be added to biscriptal learners’ programmes of English instruction.
www.alphabettheadaches.com will have further details as this project progresses.

My contact details are provided there.

As of April, 2014, I have completed all 60 mini-lessons and the lesson-by-lesson notes for instructors.
I am currently working on the Introductory pages and refining charts and diagrams.