SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

strap
chin strap

straw

string

streak

street

stripes
SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

stream

strip
  film strip

strange

strobes
  strobe lights

stretcher

strainer
sprout
Brussels sprout

Sprat
Jack Sprat

sprig

spray

sprain

spring
SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

screw

scrum
football scrum

scrap
scrap metal

scrub

screen

script

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SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

scroll

scratch

scrub
Australian scrubby bush

Scrabble

scribble

scrunchie
SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

splash

splatter

splint

Splayd

split

splice

banana split
<table>
<thead>
<tr>
<th>SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/</th>
</tr>
</thead>
<tbody>
<tr>
<td>splinter</td>
</tr>
<tr>
<td>splat</td>
</tr>
<tr>
<td>splits</td>
</tr>
<tr>
<td>spleen</td>
</tr>
<tr>
<td>splendid</td>
</tr>
<tr>
<td>splendid parakeet</td>
</tr>
<tr>
<td>splurge</td>
</tr>
</tbody>
</table>

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SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

- squad
- squat
- square
- squash
- squidgy
- squeegee

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SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

squire
medieval squire

squirrel

squiggle

squid

squabble

squatter
Australian squatter
SSP: 3-element clusters: /str/ /spr/ /skr/ /spl/ /skw/

<table>
<thead>
<tr>
<th>Most Complex</th>
<th>Sonority Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiceless fricative + nasal</td>
<td>sm sn</td>
</tr>
<tr>
<td>Voiceless fricative + liquid</td>
<td>fl fr θr sl</td>
</tr>
<tr>
<td>Voiced stop + liquid or voiceless fricative + glide</td>
<td>bl br dr gl gr sw</td>
</tr>
<tr>
<td>Voiceless stop + liquid</td>
<td>pl pr tr kl kr</td>
</tr>
<tr>
<td>Voiceless stop + glide</td>
<td>tw kw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Complex</th>
</tr>
</thead>
</table>

Consider targeting 3-element clusters, and 2-element clusters with smaller sonority differences (2 or 3 or 4).

vowels 0 voiced fricatives 4

glides 1 voiceless fricatives 5

liquids 2 voiced stops 6

nasals 3 voiceless stops 7

Clusters
Consonant clusters are more marked than singletons, but are some clusters more marked than others? One approach to classifying two-element consonant clusters according to markedness is to rank them according to their sonority difference score, using their numerical values from a sonority hierarchy (Ohala, 1999). This approach is called the Sonority Sequencing Principle or SSP. For example, /kw/ (7 minus 1) has a sonority difference score of 6, whereas /fl/ (5 minus 2) scores 3. Clusters with SMALL sonority differences of 2, 3 or 4 may better promote generalised change to singletons and clusters. Gierut (1999), Gierut & Champion (2001), and Morrisette, Farris & Gierut (2006) provide evidence and target selection guidelines.

Targeting Adjuncts
Note that the adjuncts /sp/, /st/ and /sk/ do not conform to the sonority sequencing principle with respect to generalisation.

Targeting the 3-element Clusters
Prior knowledge of the second element and the third element is required.
The 3-element consonant clusters, /spr/ /str/ /skr/ /spl/ and /skw/ should only be targeted if the child already has the relevant stop (/p/, /t/ or /k/) and the relevant liquid (/l/) or glide (w) present in his or her phonemic inventory. For example, if targeting /skw/ the child should have productive knowledge of /k/ and /w/, but does not need to have productive knowledge of /s/.

Targeting the 2-element Clusters
Prior knowledge of the first element and/or the second element is not required.
The 2-element clusters, /sm, /sn/, /fl/ etc. displayed on the chart above, can be targeted irrespective of whether the child has previous knowledge of either or both of the two elements. For example, in targeting /sl/ the child may or may not have previous knowledge of /s/ and/or /l/.

strap straw chin strap string streak street stripes stream strip strange strobes stretcher strainer sprout Sprat sprig spray spray spring screw scrub screen script scroll scratch scrub Scrabble scribble scrunchie splash splatter splint Splayd split splice splinter splat splits spleen splendid splurge squash squat square squash squidgy squeegee squire squiggle squirrel squiddly squabble squatter

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