Phonemic Awareness Phun
Sound Substitution
(Musselwhite, 2008)

Goal: To support the development of sound substitution, which requires listening to words, then substituting the initial sound to create a rhyming word (ex: Giggley goggley Gathan, a gorilla sat on Nathan.)

Brief Phonemic Awareness Research Review:
The National Reading Panel (2000, www.nationalreadingpanel.org) completed a meta-analysis of scores of articles that studied the effects of phonemic awareness (the ability to focus on and manipulate phonemes in spoken words). A brief summary of findings includes:

• PA (phonemic awareness) training resulted in improvement in students' phonemic awareness, reading, and spelling following training
• effects of PA instruction lasted well beyond the end of training
• students of varying abilities improved both PA and reading as a result of PA training
• characteristics of PA training that were most effective included:
  a) explicitly and systematically teaching children to manipulate phonemes with letters
  b) focusing instruction on one or two types of phoneme manipulations rather than multiple types
  c) teaching students in small groups

• Cautions regarding PA training include:
  a) PA training is NOT a complete reading program, but rather one component of a complete integrated reading program
  b) there are many ways to teach PA effectively - teachers must select strategies most suited to the needs of their students
  c) motivation of both students and teachers, while not extensively studied, is felt to be a critical factor for success
Implications for Students with Complex Communication Needs (CCN), Including Students who Use AAC

We know that 'explicit, systematic instruction' is essential. Often, that means a series of activities that look more like a testing agenda ("Which one rhymes with Gathan?") than a teaching, interactive agenda. While this approach may be both effective and time-efficient, sometimes students with significant disabilities are just OVER being tested!! And remember that the National Reading Panel cautions that motivation is a key factor!! In this tip, I’ll suggest ways to make activities AAIF:

a) Adapted to meet the needs of students who require AAC
b) Authentic, so students don’t feel that they’re taking yet another ‘test’
c) Individualized to meet the context and interests of target students
d) Fun and interactive

Goal: To support the development of sound substitution, which requires listening to words, then substituting the initial sound to create a rhyming word (ex: Giggley goggley Gathan, a gorilla sat on Nathan.)
Objective: Support the student in identifying which word rhymes with the nonsense word. Authentic purpose - use for helping students line up, align with themes or stories being read.

Materials: People, objects, photos, and symbols representing words that can be rhymed.

Examples: The target sound this week is /d/ because Dad and Daniela (sister) both begin with /d/
Objects: switch activated toy dog; Elmo, Buzz Lightyear, tiger, cat, sofa, chair, rug
People: Mom, Ezra, Erick, Jessica
Photos: Jen, Nana, Sara
Symbols: cat, bat, car, pen, pig, jug
Labels for each target letter (ex: d m k)

Activity:  
1) Introduce the activity.  
a) Hold up the target letter (remember: research shows that manipulating the letter plus the sound is more effective)
b) Chant: "Diggedy doggedy dee, a little dog barked at . . . me, Diggedy doggedy doo, a little dog barked at . . . you. Consider starting with people, to make the activity motivating and concrete during the introduction phase.
c) If possible, have at least three people in the room (4 is better!) After the intro chant (part b), change to rhyme with each person:  
   "Diggedy, doggedy, Dessica, a little dog barked at . . . _______”  
   Pause and have the student point to the appropriate person.
d) Give evaluative feedback. If student points to Jessica, say ‘Dessica - Jessica / Jessica - Dessica . . . it’s a rhyme!!’ Let the student make the switch activated dog bark at Jessica.
e) Give evaluative feedback for errors also. If student points to Mom, say “Let’s try it . . . ’Dessica - Mom / Mom - Dessica . . . not a rhyme’” Let’s try again. The student doesn’t make the dog bark unless there’s
a match. Help students develop their inner voice, reminding them to 'say it in your head.' Ex: “Say it with me. Kellie, say it in your head . . . Dessica - Jessica, etc.”

2) Increase the difficulty
a) Now offer the student a choice of several objects or photos or symbols (at least three)
b) Chant: “Diggedy doggedy dug . . . the little dog barked at the . . . “ (rug) etc.
c) Have the student eye gaze or use partner assisted scanning to show which object / photo / symbol rhymes with dug

d) Remember to use evaluative feedback!

3) Introduce a second sound. Remember!! The brain is a pattern detector!! We need to introduce more than one sound so the student has patterns to detect! Now repeat the activity with a 2"nd sound. This may be done on a different day (ex: /m/ since it’s the first sound in Mom). Mippity moppety merry, a monkey jumped on Jerry. (use a toy monkey). Start first with names of familiar people, and only progress to objects or photos when the student is successful with people. Repeat the process.

4) Continue the process, focusing on having fun finding items, and 'testing' (showing 4 items or symbols). While you may only practice two sounds the first session(s), continue this until the student can correctly identify rhymes representing about six different initial phonemes.

5) Extend the activity to shared reading. For example:

   a) Read a book, and go for a hunt for words that rhyme. 'Let’s listen for some words that rhyme in this book. Students can use a simple step-listing device to call out rhymes.
b) Help students make a **Giggley People Book**. Sample pages:

(NOTE: velcro on each page over blank; photos available to affix)

1. **Giggley Goggley Gathan**,  
   A gorilla sat on ___________! (Nathan)

2. **Giggley Goggley Genna**,  
   A gorilla sat on ___________! (Jenna)

3. **Giggley Goggley Gericka**,  
   A gorilla sat on ___________! (Ericka)

b) Help students make a **Giggley Things Book**. Sample pages:

(NOTE: velcro on each page over blank; photos available to affix)

1. **Giggley Goggley giger**,  
   A gorilla sat on the ___________! (tiger)

2. **Giggley Goggley gat**,  
   A gorilla sat on the ___________! (mat / cat)

3. **Giggley Goggley gable**,  
   A gorilla sat on ___________! (table)

Remember to have your student 'read it in your head.' Developing an inner voice is VERY important for all students, but especially for students who rely on AAC!

d) Use sound substitution for a 'sponge' activity.  
   For example, use it for line up / release. Giggley, goggley Gonathan, it's time to line up . . . Jonathan!
e) Listen to sound substitution rhymes. These use the tune from ‘Williby, Wallaby, Woo, by Raffi.’ Several are available on Musselwhite CDs, as shown below: [www.aacintervention.com](http://www.aacintervention.com)

<table>
<thead>
<tr>
<th>CD</th>
<th>Sound / Rhyme</th>
<th>Screenshots</th>
</tr>
</thead>
</table>
| Singing to Learn CD | Giggley, goggley, gee  
A gorilla sat on me                                                                 | ![Giggley, goggley, gee](image1.png) |
| On My Walk CD      | Bibbety, bobbity bretchen,  
A bumblebee buzzed round Gretchen                                            | ![Bibbety, bobbity bretchen](image2.png) |
| Poetry Power CD    | Riggedy raggedy Rames  
A rattlesnake hissed at James                                                   | ![Riggedy raggedy Rames](image3.png) |

f) Use a ready-made songboard! Musselwhite & Keeney (2007) have developed a CD with 33+ songboards. Several of those songboards support phonemic awareness. Here are two!!

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6) Have fun with fairy tales. See the attached chants!
7) Computer fun - Errorless. Errorless activities can support students in listening for patterns - just don’t get ‘stuck’ on errorless. Be sure to move on as soon as possible to activities that require more cognitive engagement!  [www.aacintervention.com](http://www.aacintervention.com)

<table>
<thead>
<tr>
<th>CD</th>
<th>Rhyme</th>
<th>Screenshots</th>
</tr>
</thead>
<tbody>
<tr>
<td>On My Walk CD</td>
<td>ay: play / way / today / away</td>
<td></td>
</tr>
<tr>
<td>Caterpillar chant</td>
<td></td>
<td>Caterpillar, caterpillar in the way!</td>
</tr>
<tr>
<td>Butterfly chant</td>
<td></td>
<td>Caterpillar, caterpillar go away!</td>
</tr>
<tr>
<td>What’s Cooking CD</td>
<td>ake: cake / bake / make / steak</td>
<td>Caterpillar, caterpillar eat it today.</td>
</tr>
<tr>
<td>Cooking Rap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAPS CD</td>
<td>ash: trash / bash / mash / dash</td>
<td></td>
</tr>
<tr>
<td>Cash - Trash Rap</td>
<td></td>
<td>Trash Rap.</td>
</tr>
<tr>
<td>Looking Great -</td>
<td>ate: late / fate / wait / great</td>
<td></td>
</tr>
<tr>
<td>Party Rap</td>
<td></td>
<td>Joanna have to bash bash bash</td>
</tr>
<tr>
<td>Pizza Today - Pizza Rap</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ay: way / today / okay</td>
<td>Then we need to mash mash mash.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>And we’re gonna dash dash dash</td>
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8) Beyond Errorless Computer Activities: Below are screenshots of several computer activities that require more cognitive engagement. These are on a range of CDs: www.aacintervention.com

<table>
<thead>
<tr>
<th>CD</th>
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</tr>
</thead>
<tbody>
<tr>
<td>What’s Cooking CD</td>
<td>soup - soup / group</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Cooking Rap More</td>
<td>ake - cake / bake / make / snake</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Night - ot Poem w/ Pics</td>
<td>night / light / right</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td></td>
<td>ot - hot / rot / not</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>RAPS CD</td>
<td>an - Dan / Stan / Ann</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Pizza Today:</td>
<td>at - Matt / Nat</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Pizza Patza Pat Cash</td>
<td>nick - Nick / Rick</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Cash for Trash:</td>
<td>Who’s Got It</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
<tr>
<td>Looking Great:</td>
<td>Funky Hair</td>
<td><img src="Image" alt="Screenshot" /></td>
</tr>
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9) What About Older Students? Use chants instead of songs. Light tech – look at the RAPS Sound Substitution activity at: www.learningmagic.com Click on ‘Caroline’s Corner’ for many tips, including this one.
These chants go with the RAPS Stories:

Looking Great: Cash for Trash: Pizza Today:

Shiny, shirt, _______ (Shunathon),
The shirt is now on _______ (Jonathan)

Tricky, trashy, _______ (Trina),
Trash fell on _______ (Nina)

Pizza, patzo, _______ (Pat),
Pizza fell on _______ (Matt)
Great Resources for Supporting (and Understanding) Phonemic Awareness Instruction


See also: [www.nellieedge.com](http://www.nellieedge.com) (the website by Nellie Edge)
Check out her numerous articles on using motivating activities to teach phonemic awareness and phonics, such as: *Developing Phonemic Awareness and Phonics Skills Within the Context of Songs and Rhymes*