



PROFILE OF PHONOLOGICAL AWARENESS

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2012

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Overview

The Profile of Phonological Awareness (Pro-PA) was developed for the purpose of evaluating and describing the phonological awareness skills of individuals approximately three years of age and older. Phonological awareness skills are related to speech sound and literacy development and should be assessed in children with difficulties in speech, language and/or reading (Catts, 1993; Gillon, 2002, 2005). Describing phonological awareness skills in students can make it easier for educators and clinicians to target early, and even later, reading difficulties as these foundational skills are strongly related to early and later reading skills (Catts, 1993; National Institute of Child Health and Human Development, 2000; Stanovich, 2000), writing skills (Clarke-Klein & Hodson, 1995), and speech and language skills (Carroll & Snowling, 2004; Gillon, 2000, 2002, 2005). This evaluation can be considered as part of a full speech, language, and/or literacy evaluation or can stand alone. The Pro-PA was developed by Tanya Coyle and published by Smarty Ears and can be used with individuals of all age groups. The Pro-PA is compatible with the iPad running iOS 4.0 or above.

Uses

The Profile of Phonological Awareness can be used to:

- Collect information regarding an individual's phonological awareness skills;
- Help educators and clinicians choose areas of skill development to target, if required;
- Measure treatment effectiveness and skill growth over time;

Features

- Ability to enter students' information and track their progress over time;
- Tests most areas of phonological awareness development with separate information about consonant clusters;
- Offers ability to choose which sections to administer and ability to skip sections without compromising totals;
- Ability to see students' skill levels at a glance with colour coded scores;
- Ability to see a group of students' average skill levels at a glance with colour coded scores;
- E-mail and/or print test results immediately after its administration;

- Colour changing counter included to help students visualize segmenting and provide support to students when attempting segmenting;
- Automatic analyses of the following skill areas:
 - Rhyming - Identification and production
 - Blending - Syllables and sounds in words (including consonant clusters)
 - Isolating - First, last, and middle sounds in words
 - Segmenting - Words, syllables, and sounds (including consonant clusters)
 - Deleting - Syllables and the first sound in words (including consonant clusters)
 - Substituting - First and last sound in words
- Compatible with iPad running iOS 4.0 or later;
- Add notes throughout the assessment, with pre-written common errors or answer patterns available for faster administration;

Areas Assessed by Pro-PA

The Pro-PA aids in obtaining a complete picture of a student's individual skill areas in phonological awareness by assessing and analyzing errors and providing information about the approximate skill attainment in each individual area. A student's strengths and weaknesses can be described as not attained (<50% success), emerging (50-79% success), or achieved (> or = 80% success). An understanding of the profile of skill attainment as well as specific types of errors made by a child, which can be outlined in the notes, will result in an intervention plan that can more appropriately and specifically target the child's phonological awareness difficulties.

Administration Considerations

The Profile of Phonological Awareness evaluates phonological awareness skills in 7 general areas, sectioned into several sub skills within each area working from larger phonological units, such as words and syllables, to smaller phonological units, such as phonemes (i.e. sounds). There are 12 separate subtests within the Pro-PA. An examiner can choose to administer all 12 subtests or only certain subtests in order to gather the data they need for various situations. For instance, since substituting sounds is not typically attained until grade two, a teacher or clinician working with younger children may choose to skip those sections altogether for faster administration.

The Pro-PA tabulates phonological awareness skills and will automatically generate a report. Reports can be generated for individual students, and/or for groups of students, depending on the information the examiner desires. For groups, it also generates a table of all scores across all areas listed by student, in order to more quickly define sub groups of children who are at relatively similar skill levels and could work together on these areas. While colour coding within the email is not possible at this time, it is suggested that an examiner print the table and highlight scores in different colours to more easily recognize strengths and weaknesses across all students in the group. Students who require intervention may also be organized into a group within the Pro-PA app, in order to reassess and monitor skill development over time and help identify those that are progressing and those that require further intervention.

Consonant clusters are highlighted separately in the results

Consonant clusters (or blends) are more difficult to process and manipulate within words. Therefore, words with these features have been included within the test in the appropriate sections (e.g. blending, segmenting, and deleting sounds in words). These types of words are counted as a separate score within that section in segmenting and deleting so that one can more quickly gain an idea of where a student is breaking down in skill development. For instance, a student may be able to segment sounds in words, so long as the word does not contain a consonant blend. In that case, the student's score would indicate achieved skill development for segmenting sounds, and the separate section outlining skill development specific to consonant blends could be emerging or not attained. Assuming a student is old enough to have developed the skill for clusters, it could indicate focussed intervention on segmenting and/or deleting sounds within words that specifically contain consonant clusters.

Administration time is decreased without effecting accuracy

Items were field tested and chosen based on words that do not have common foils to success in order to more accurately outline a student's skills. Trial items contribute to the ceiling of each section. Four incorrect items in a row (including trials) allows examiners to move to the next subtest. Also, no criterion was included due to the increased possibility of false positives that often occur when using criterion scores for this sort of assessment. This resulted in:

- no need to be concerned about any items that result in incorrect responses from the majority of students.
- ability to skip entire sections that may not apply to a student's situation in order to speed up administration.
- Ability to skip to the next section more quickly if a student clearly does not understand the task or has not yet mastered the skill.

Manual tabulation of a child's responses is eliminated

The examiner records the errors during administration and the Pro-PA performs all calculations. Results from the evaluation are described according to approximate skill development level and are produced in easy-to-read, colour coded tables within the app, along with the exact percentage scores. The Pro-PA simultaneously records and tabulates scores in order to give a percentage of accuracy for a general area, as well as the subtests within each area as soon as the administration is completed. If a subtest was not administered, it is noted in order to prevent confusion that a student may not have mastered a skill when, in fact, it had not been assessed.

A report is automatically produced

The results of the Pro-PA administration are immediately available via email or to print so that they can be available for a classroom teacher or speech-language pathologist, included with a full assessment, and/or written into goals.

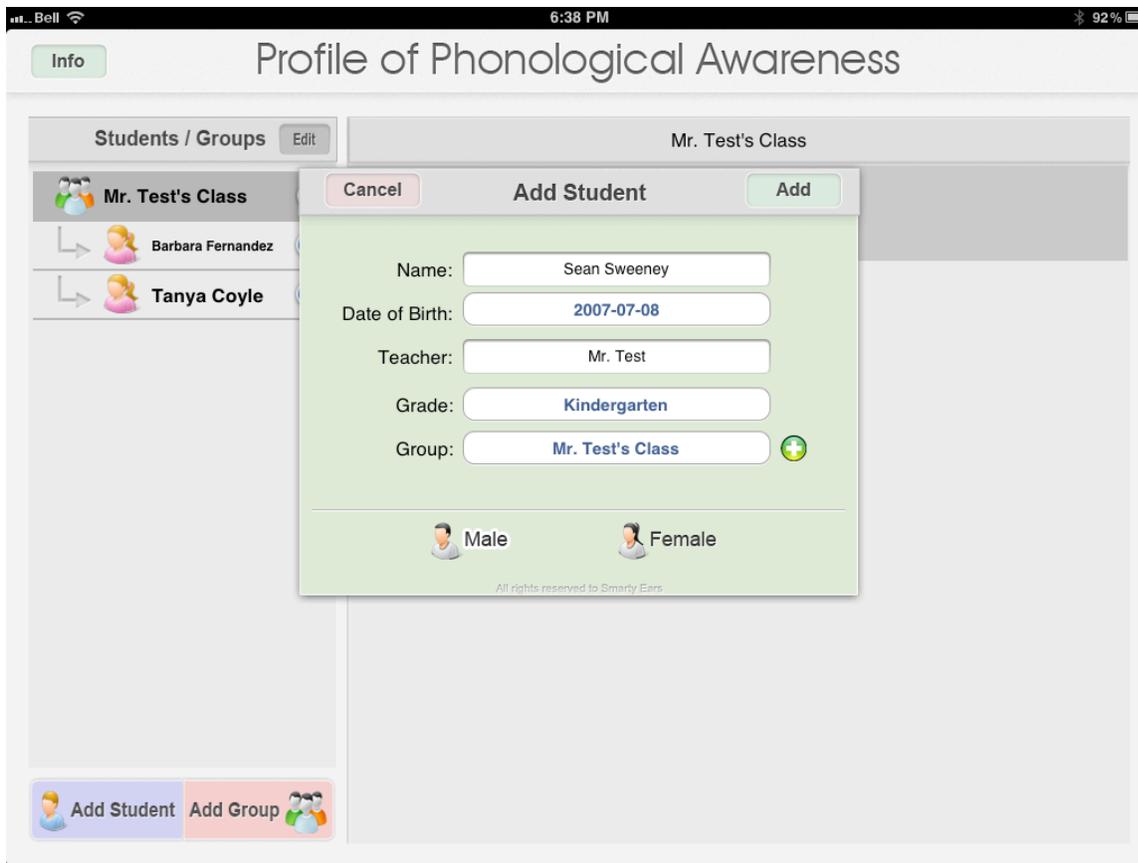
How to Use App

Administration Time

Administration time is between 10 and 20 minutes. The administration time varies depending on the student's attention span, the skill level or age of the student, and the speed at which the student can process the information and provide responses.

Adding Users

In order to administer the Pro-PA, the examiner must first enter the name and the date of birth of student being tested. Examiners can also include the name of the teacher, grade of the student, and add students to groups when adding a student. In order to enter a new student click on the "add student" on the main menu. See image below:



A pop up screen will allow you to enter the student's information. Afterwards, click 'add' to store the information. The student will then appear in the left hand column.

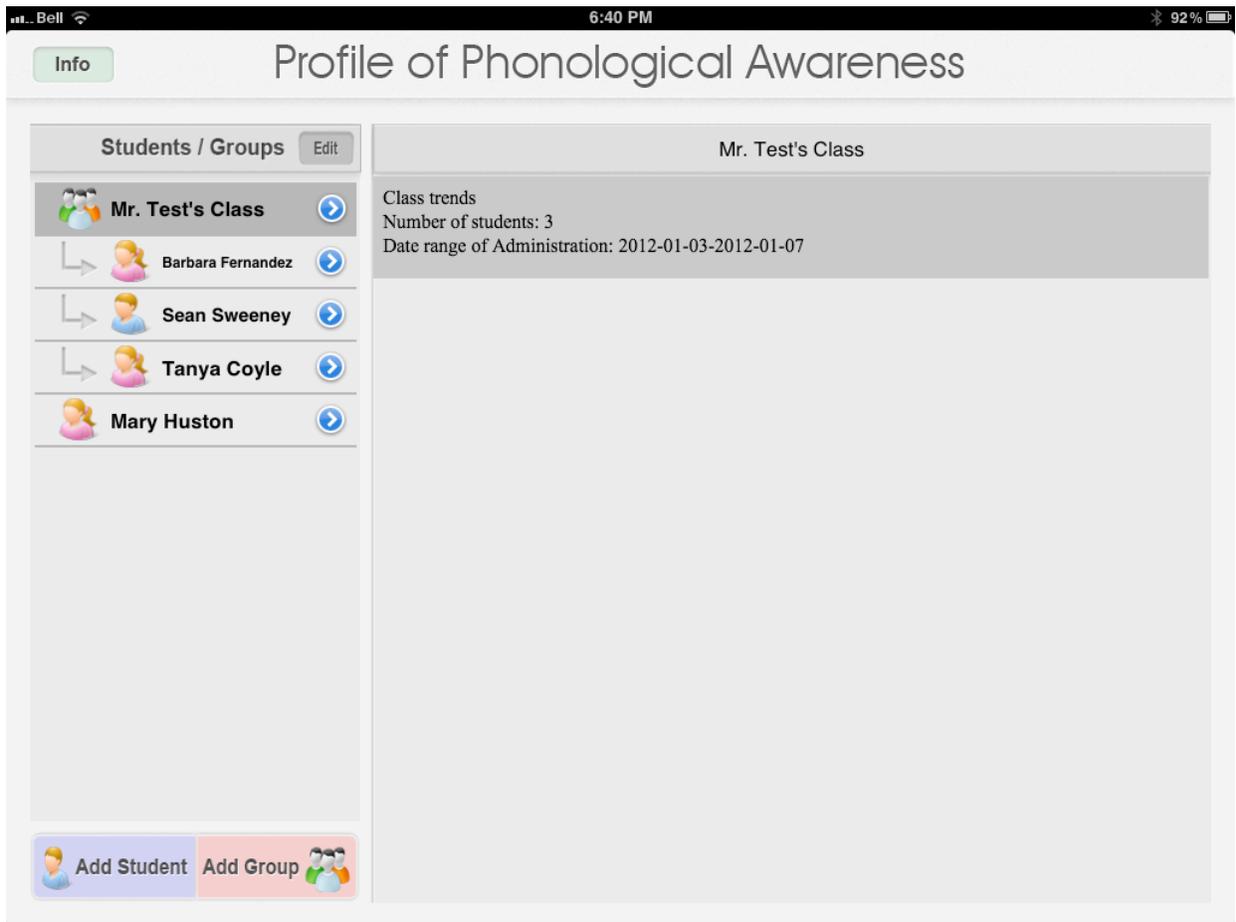
Repeat this process for every student to whom you wish to administer the Pro-PA.

Adding Groups

You can add a group by clicking the "Add Group" button and naming the group. Groups do not automatically appear in the left hand column like students do. You must assign one or more students to a group for groups to appear. To assign students to a group, click on the student's name then click the blue arrow to the right of the student (or add a new student). The student's information box will appear in a pop up window. At the bottom of this box you have the option to add a student to a group by scrolling through the existing group names or adding a new group name. In the image above, the student was being added to the group called "Mr. Test's Class".

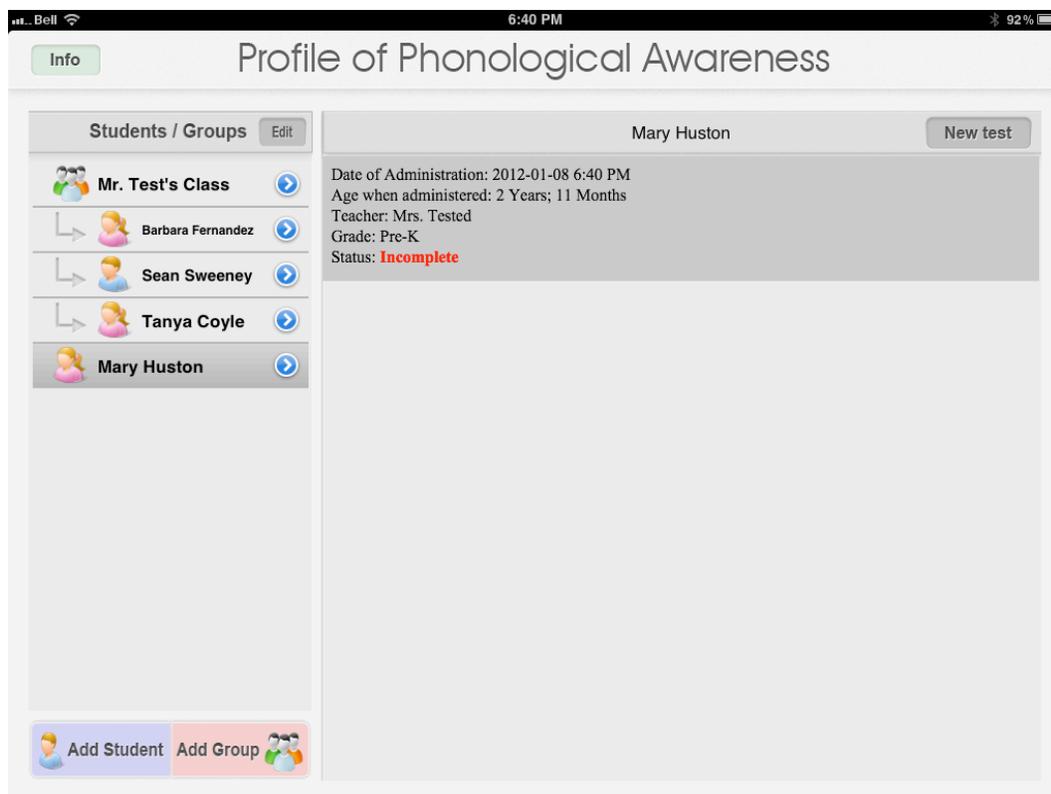
Once a student has been assigned to a group, they will appear in alphabetical order (by first name) under the group name with an arrow to the left of the student's name to indicate that they belong to that group.

In the image below you can see that Barbara, Tanya, and Sean belong to the group “Mr. Test’s Class” but that Mary does not belong to a group.



Initiating an Assessment

In order to initiate an assessment you must first choose the student you want to assess. Then you tap on the “New test” button located on the right side of the screen.



In the image above, Mary is the selected student and she has an incomplete test. The clinician can complete the test that has been started or click “New test” to start over.

Using the Testing Screens

The test will begin with Rhyme - Identification. At the top right the ‘info’ button will provide full directions that can be read to the student during administration. These directions include the demo. If you do not require the full instructions, the demo is located along the top and a single sentence for general instructions of each item is included at the top as well. All items (including the trials) have three buttons: Not Administrated, Correct, and Missed. The default is ‘Not Administrated’. Click ‘Correct’ or ‘Missed’ as you administer each item. The trial items do not count towards the overall total in the results, but are counted towards the ceiling of four incorrect items in a row before skipping to the next section.

You can skip the entire section (e.g. Rhyming, Blending, Isolating, etc.) by clicking the arrow button on the top right. You can go back to the main menu by clicking the home button, and you can add notes by clicking the page button. You can skip back and forth between subtests within a section (e.g. Rhyme Identification, Rhyme Production) by clicking the green arrows at the bottom right and left of the page.

Rhyme - Production

DEMO: cat (hat-sat)

Tell me 2 words that rhyme with...

Trial

Trial 1: late Not Administered Correct Missed

Trial 2: rug Not Administered Correct Missed

Items

Not Administered	Correct	Missed	1. boat
Not Administered	Correct	Missed	2. ring
Not Administered	Correct	Missed	3. go
Not Administered	Correct	Missed	4. soap
Not Administered	Correct	Missed	5. bite
Not Administered	Correct	Missed	6. meat

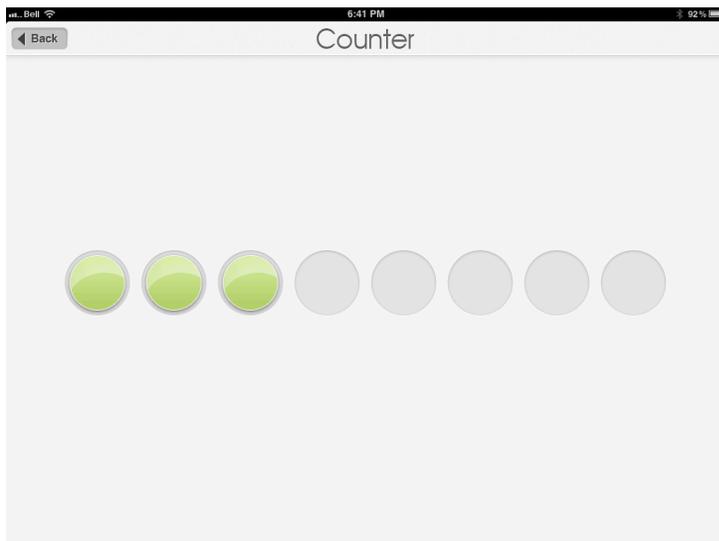
Discontinue after 4 incorrect responses in succession including both trials (but not the demo)

Annotations:

- Click to see full instructions (Info button)
- Click to skip entire section (Skip icon)
- Click to pause test and return to the (Pause icon)
- Click to add notes (Notes icon)
- Click to move ahead or back one subsection (Bottom navigation arrows)

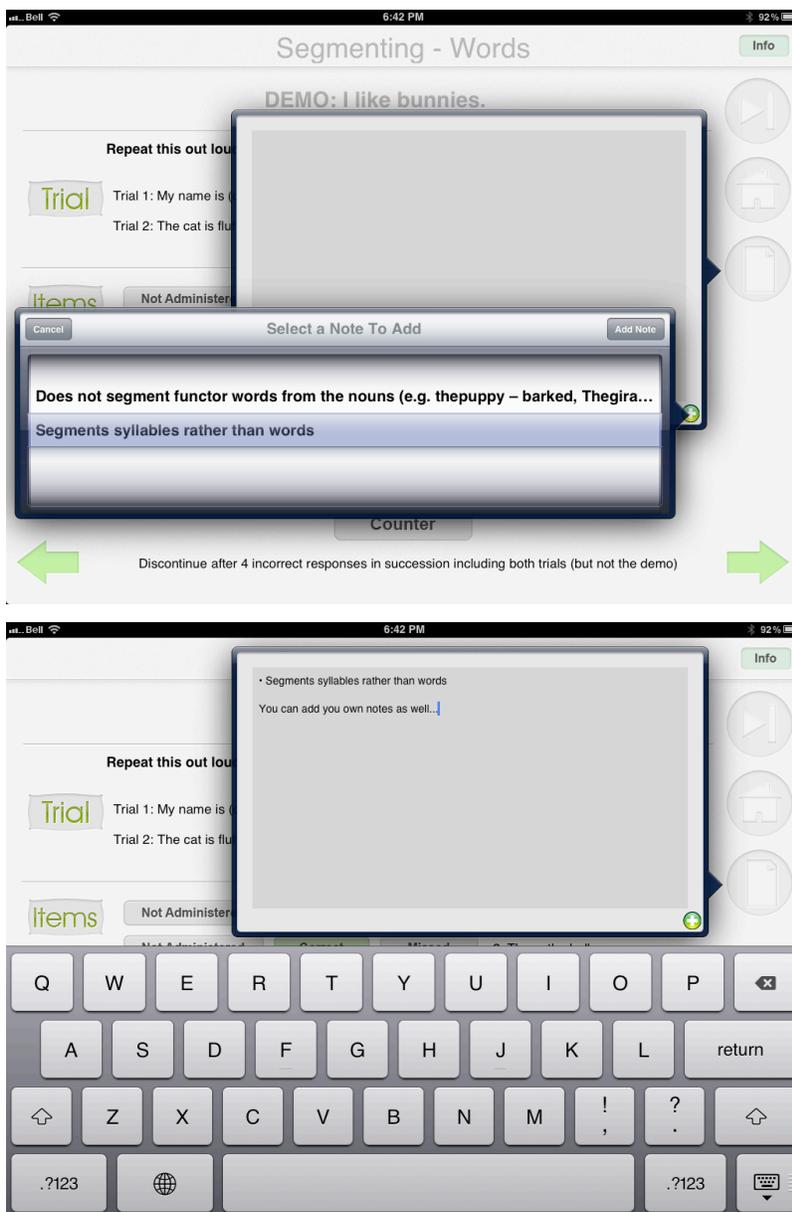
Using the Counter

In all of the Segmenting subtests, a counter is available by clicking the “counter” button at the bottom of the screen. A screen with 8 circles appears. Students can touch each button to make it change colour as they segment words, syllables, or sounds. This visualization often helps students to keep track as they segment, especially when segmenting, or ‘counting’, words. To go back to the test, click the ‘Back’ button in the top left.



Using the Notes Function

In each section the examiner is able to make notes about error or behaviour patterns observed (see Providing Instruction to Students for examples). Several pre-written notes are available to be selected in each section in order to make administration faster, while maintaining thorough information to help set more specific goals and intervention plans. These pre-written notes describe most typical error or behaviour patterns students present. They can be selected by clicking the green + sign in the bottom right corner of the notes pop up. Examiners can also add their own notes if the pre-written notes do not capture the added information desired.



Providing Instructions to Students

Instructions and potential wording are provided to you for each section under the 'info' button while testing. Wording is suggested only. Use whatever wording is most familiar to the child so that they understand the task. Below are the instructions available in app, as well as some added information to aid you in interpretation of responses and the pre-written notes (available in the Notes section for each subtest).

Rhyme identification

Say to the student; "I'm going to say three words, and I want you to tell me if they rhyme, or sound the same. For instance, cat-bat-hat – those words rhyme (sound the same). Now you try one; do these words rhyme?"

Note: A child could achieve 3 or 4 out of 6 in this subsection through guessing, therefore, they require a 5 or 6 out of 6 to be interpreted as truly achieved. Use your judgment to decide if they are likely guessing or not and select it from the previously prepared options under 'notes' (see below).

Pre-written notes available for selection:

- Randomly guessing

Rhyme production

Say to the student; "Now I will give you a word, and I want you to tell me two words that rhyme with, or sound the same as, that word. For instance, if I asked you for two words that rhyme with 'cat', you could say bat and mat". List other examples of words that rhyme with cat if you feel the student requires extra examples.

"Now you try. Tell me two words that rhyme with late". If the student only provides one word, prompt them for a second word.

Pre-written notes available for selection:

- Generally gets one correct rhyme but one incorrect rhyme
- Provides associated words rather than rhyming words
- Provides one rhyme for every trial using the same first sound (e.g. cote, king, ko, cope, kite, keat) but not a second rhyming word.
- Uses the same 1 or 2 beginning sound(s) to create all rhyming words (e.g. hote/coat, hing/king) (marked correct – observational only)
- Provides near rhymes but changes the last sound too

Blending syllables

Say to the student; “Now I am going to say a word very slowly and you guess what word I’m saying. For instance if I say pa (pause 1 second) per, the word I said was ‘paper’. Now you try one. What word am I saying? Dough (pause 1 second) nut”.

If the student repeats the word slowly like you did, prompt them to ‘put the word together’ or ‘say it faster’.

Pre-written notes available for selection:

- Repeats back broken without blending
- Requires multiple prompts to ‘put the word together’

Blending sounds

Say to the student; “Now I will say the word even more slowly, every sound in the word, and you guess what word I’m saying. For instance, if I say p...i...t, the word I said was ‘pit’. Now you try one. What word am I saying? P....o....t”.

If the student repeats the word slowly like you did, prompt them to ‘put the word together’ or ‘say it faster’.

Pre-written notes available for selection:

- Repeats back broken without blending
- Requires multiple prompts to ‘put the word together’
- Changes sounds in the words
- Adds sounds to the words

Isolating initial sounds

Say to the student; “Now I want you to tell me the first sound you hear in each word. For instance, the first sound in ‘bat’ is /b/; **b**-a-t. Now you try one. What is the first sound you hear in hat?”. If the student gives you a letter name, say “what sound does _ make? I want the SOUND, not the letter” or redirect similarly with wording that is familiar to the student. Mark speech sound substitution errors as wrong, but note that they were using speech sound errors.

Pre-written notes available for selection:

- Provides correct first sound but not isolated from the vowel sound (e.g. /bo/ for 'boat' rather than /b/).
- Provides last sound instead
- Requires constant prompts to provide letter sound rather than letter name
- Provides the same sound for all items
- Attempts to provide rhyming or associated words

Isolating final sounds

Say to the student; "Now I want you to tell me the last sound you hear in each word. For instance, the last sound in 'bat' is /t/; b-a-t. Now you try one. What is the last sound you hear in big?". If the student gives you a letter name, say "what sound does _ make? I want the SOUND, not the letter" or redirect similarly with wording that is familiar to the student. Mark speech sound substitution errors as wrong, but note that they were using speech sound errors.

Pre-written notes available for selection:

- Provides correct last sound but not isolated from the vowel sound (e.g. /ip/ for 'tip' rather than /p/).
- Requires constant prompts to provide letter sound rather than letter name
- Provides the first sound instead
- Provides the same sound for all items
- Attempts to provide rhyming or associated words

Isolating medial sounds

Say to the student; "Now I want you to tell me the middle sound you hear in each word. For instance, the middle sound in 'bat' is /æ/; b-a-t. Now you try one. What is the middle sound you hear in boat?". If the student gives you a letter name, say "what sound does _ make in the word ____? I want the SOUND, not the letter" or redirect similarly with wording that is familiar to the student. Mark speech sound substitution errors as wrong, but note that they were using speech sound errors.

Pre-written notes available for selection:

- Provides correct medial sound but not isolated from the first or last sound
- Requires constant prompts to provide letter sound rather than letter name

- Has more difficulty with short/lax vowels (e.g. met, mitt, bud)
- Provides a vowel sound, but the wrong one
- Provides the first/last sound instead
- Provides the same sound for all items
- Attempts to provide rhyming or associated words

Segmenting words

Say to the student; “Now I want you to repeat a sentence after me and tap every time you say a word in the sentence. Like this ‘I (pause) like (pause) bunnies’” Demonstrate the counter at this time if you plan to use it. The student touches a button each time they say a word. “Now you try, tap every time you say a word in ‘My name is ____’”. Ensure during the trials that the student is not segmenting syllables and explain accordingly.

Pre-written notes available for selection:

- Does not segment functor words from the nouns (e.g. thepuppy – barked, Thegiraffe - istall)
- Segments syllables rather than words

Segmenting syllables

Say to the student; “Now I want you to break up the syllables in each word. You can say the word and tap or clap out the syllables to count how many there are. For example ‘flower’ has 2 syllables; flow—er. Now you try one. Tap (or clap) out all the syllables in rabbit”. Ensure that the student says the words while segmenting them to be sure you hear where and how they are being segmented.

Pre-written notes available for selection:

- Segments sounds instead of syllables
- Segments 2-syllable words correctly but not shorter/longer words
- Segments 3+ syllable words but not 1-2 syllable words
- Adds/repeats syllables in words when segmenting

Segmenting sounds

Say to the student; “Now I want you to tell me all the sounds in each word. For instance, ‘cat’ has 3 sounds: c—a—t.” You can use the counter or you can use your fingers or any other visual to demonstrate this to the student. “Now you try one. Tell me all the sounds in ‘up’”.

When you reach the 3rd trial (for consonant blends), administer it as if it were a test item, but you can correct and explain to the student if they make a mistake on that particular item. This item is **not** counted in the total.

Pre-written notes available for selection:

- Does not segment the vowel from the first and/or last consonants (e.g. mee-eet, mee-ee-t, or m-ee-eet for ‘meet’)
- Only segments the onset from the rime (e.g. m-eet)
- Drops a sound in consonant blends (e.g. s-o-p for ‘stop’)
- Changes a sound in the word while segmenting the sounds (e.g. m-ee-k for ‘meet’)

Deleting syllables

Say to the student; “Now I want you to say a word, and then take away one of its parts, or syllables. For instance I’ll tell you to ‘say the word hotdog but don’t say dog, and what you have left is ‘hot’. Now you try one. Say the word rainbow (pause for child to say the word). Now say rainbow again, but don’t say rain”.

Pre-written notes available for selection:

- Can only delete syllable if second syllable (e.g. hot(dog)) but not if first syllable (e.g. (rain)bow) is deleted
- Deletes correct syllable but also deletes or does not delete a sound from an adjoining syllable (e.g. says ‘pence’ for ‘pen(cil)’ – use clinical judgment for marked correct or not

Deleting sounds

Say to the student; “Now I want you to say a word, and then take away the first sound. For instance I’ll tell you to ‘say the word cat but don’t say /k/, and what you have left is ‘at’. Now you try one. Say the word big (pause for child to say the word). Now say big again, but don’t say /b/”. When you reach the 3rd trial (for consonant blends), administer it as if it were a test item, but you can correct and explain to the student if they make a mistake on that particular item. This item does not count in the total.

Pre-written notes available for selection:

- Repeated word without deleting first sound
- Deleted last sound
- Deleted entire consonant blend instead of initial sound (e.g. “oke” instead of ‘moke’ for ‘(s)moke’)

Substituting initial sounds

Say to the student; “Now I want you to say a word and then change the first sound in the word. For instance, I’ll tell you to ‘say the word cat but change /k/ to /m/. Then the word ‘cat’ changes to ‘mat’. Now you try one. Say the word hot (pause for student to say the word) now say hot again but change /h/ to /p/”.

Pre-written notes available for selection:

- Substitutes sound correctly but changes another sound in the word (e.g. ‘pock’ for hot->pot)
- Add sound to be substituted to the end of the word (e.g. ‘bark’ for bar->car)
- Substitutes initial and final sound (e.g. ‘pop’ for hot->pot)
- Repeats original word without changing it
- Provides first/last sound in word
- Substitutes final sound instead of initial sound (e.g. ‘hop’ for hot->pot)

Substituting final sounds

Say to the student; “Now I want you to say a word and then change the last sound in the word. For instance, I’ll tell you to ‘say the word cat but change /t/ to /b/. Then the word ‘cat’ changes to ‘cab’. Now you try one. Say the word tip (pause for student to say the word) now say tip again but change /p/ to /k/”.

Pre-written notes available for selection:

- Substitutes initial sound instead of final sound (e.g. ‘got’ for hot->hog)
- Adds sound to be substituted to the end of the word (e.g. ‘past’ for pass->pat)
- Substitutes sound correctly but changes another sound in the word (e.g. ‘kite’ for life->light)
- Substitutes initial and final sound (e.g. ‘gog’ for hot->hog)

- Repeats original word without changing it
- Provides first/last sound in word

Documenting Errors on Pro-PA

Recording Errors

Recording errors on the Pro-PA is very simple. Each item is set to 'Not Administered' by default, in order to capture any skipped sections without interpreting them as 'unattained'. As you administer items, you click the appropriate button for correct or incorrect. Tap correct or incorrect for the trial items as well. They are not included in the score calculation, but are included in the ceiling calculation of four in a row incorrect items to stop the subtest and move on to the next section. If the examiner skips to the next section after administering two or more items (because the student has gotten both trials and the first two items incorrectly), that section will be calculated as 'unattained', rather than 'not administered'.

Ending the Testing Session

You are able to skip sections in the Pro-PA if they do not apply to your situation or needs. Unfortunately, at this time the final subtest, Substitution - Final, requires you to input scores in order to complete the test. If you are actually skipping the section, rather than administering it, this should be obvious by a lack of Substitution - Initial score. You may want to make a note at the end of the test session (a general notes section pops up automatically), to comment that the last section was skipped rather than administered.

Once the examiner finishes administration of Pro-PA, they will find a screen asking if the assessment has been completed. If the examiner has missed or skipped sections it will ask if you want to mark this test as complete - click 'yes' if you meant to skip sections and click 'no' if you want to continue the assessment at another time or go back to administer sections you may have previously skipped. Also, if you need to stop testing for a short period of time and plan to come back to the assessment later, you can click the menu button on the right hand side to go back to the menu and pause the testing session. You may resume testing by clicking on the testing session again at a later date.

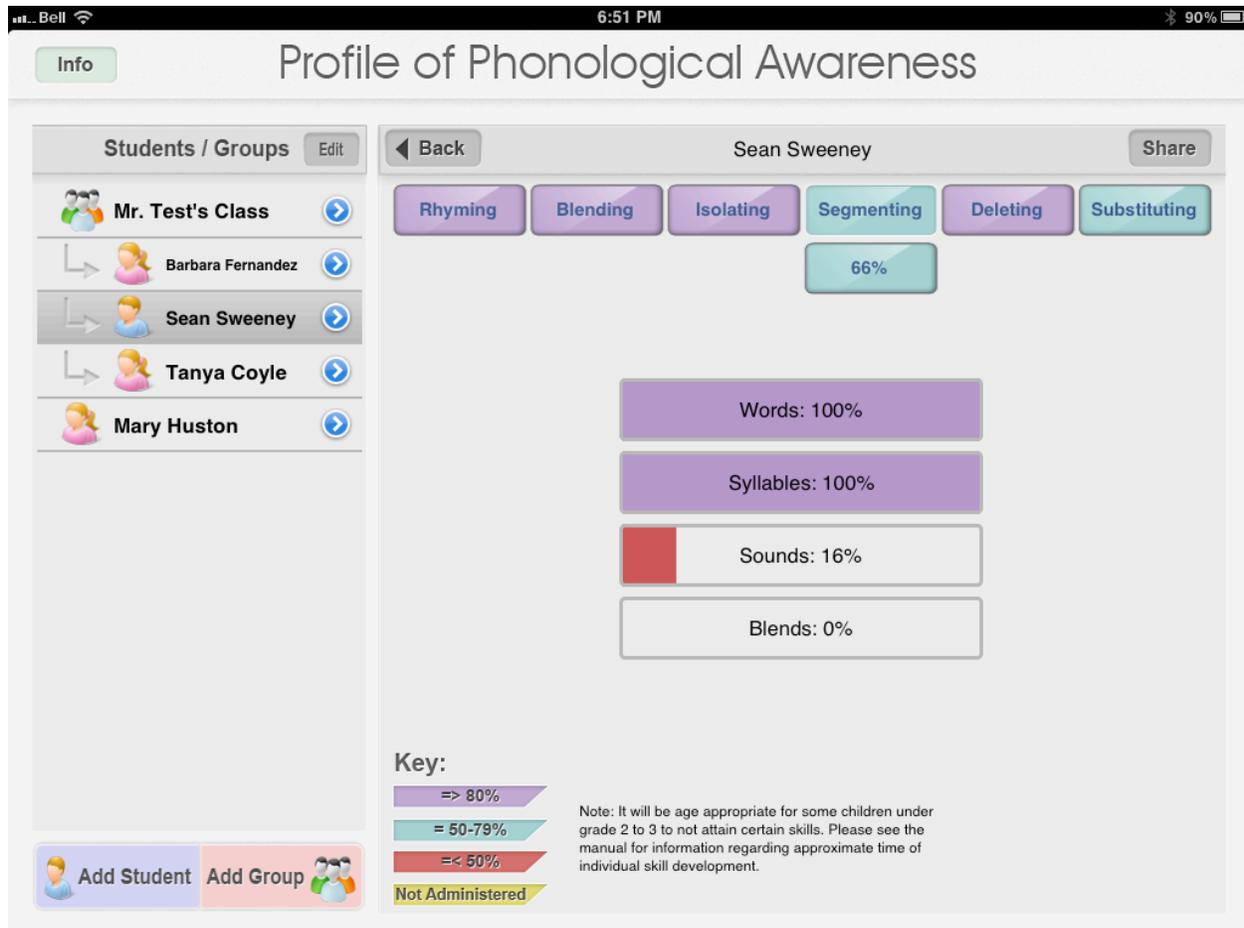
Interpreting Results

Colour Coded Tables

The Profile of Phonological Awareness app presents the results in seven different colour coded tables for each of the major sections (e.g. Rhyming, Blending, Isolating, etc.).

Scores

A percentage score is produced by calculating the number of items in a section (including all subtests) minus the total number of errors. The overall score of all subtests within a larger section is tabulated and colour coded for faster interpretation (e.g. the combined rhyme identification and production totals are represented as the associated colour on the tab that says “Rhyming”). Click on a section to see the breakdown of scores within that section. See image below:



Based on this example you can determine that this student is generally able to rhyme, blend, isolate, and delete and that segmenting and substitution are emerging. You can also determine individually that segmenting words and syllables is not an area of difficulty, but that segmenting sounds and consonant blends is where the student is having difficulty.

Note: This student is only in kindergarten. It is not necessarily developmentally appropriate for this student to be able to segment sounds and consonant blends.

Approximate Grade of Acquisition of Skills

The Pro-PA distinguishes skills that students have or do not have, but not all students should have developed all skills. Based on various sources and current research (Andreassen & Smith 2008; Johnson & Roseman, 2003; Schrieber, 2008; Paul, 2007), Table 1 summarizes approximate times of acquisition.

TABLE 1. TIMEFRAME FOR ACQUISITION OF PHONOLOGICAL AWARENESS SKILLS.

SKILL	SUB SKILL	APPROX. GRADE
RHYMING	Identification	Preschool-Kindergarten
	Production	Preschool-Kindergarten
BLENDING	Syllables	Kindergarten-Grade One
	Sounds	Kindergarten-Grade One
ISOLATING	Initial Sound	Preschool-Kindergarten
	Final Sound	Preschool-Kindergarten
	Medial Sound	Kindergarten-Grade One
SEGMENTING	Words	Preschool-Kindergarten
	Syllables	Preschool-Kindergarten
	Sounds	Kindergarten-Grade One
DELETING	Syllables	Kindergarten-Grade One
	Sounds	Grade One-Grade Two
SUBSTITUTING	Initial Sound	Grade One-Grade Two
	Final Sound	Grade One-Grade Two
CONSONANT CLUSTERS	Segmenting and Deleting	Grade One-Grade Two

Sharing Results

E-mailing Results

Examiners can e-mail the results of the assessment immediately after the assessment is completed. In order to e-mail the results, click on the “Share” button and a pop up screen will display options for sharing the results by e-mail.

Users can e-mail the results to themselves in order to save for their records and keep a backup of the student’s assessment, or to send to the parents, teacher, or other individual who is involved.

Note: E-mail is not a secure form of transmitting or sharing private or confidential information and may not comply with federal information privacy and protection acts. Printing or creating documents directly through iTunes on your computer may be a more secure option.

Printing Results

Examiners can print the results directly from their iPad with an AirPrint compatible printer.

Obtaining Results Through iTunes

Examiners can share results directly from iTunes on a computer in a secure way. Connect your iPad to iTunes. Go to the tab labelled ‘Apps’ on iTunes with your device connected. scroll down to the bottom of that page where it says “File Sharing” and click on the Pro-PA app. To the right of the selected Pro-PA app you will see a section entitled “ProPA Documents”. There you will see the folders with the names of all the students from your app who have test information associated with them. Click the folder for the student you want, then click ‘Save to...’ and save the folder where you want it on your computer. When you open the folder, you will see the email summary of results for that student. Please see this video tutorial for a walk-through: <http://vimeo.com/34507926>

About the Author

Tanya Coyle, M.Sc., S-LP(C), Reg. CASLPO

Tanya Coyle is currently a speech-language pathologist for the Lambton-Kent District School Board in Southern Ontario, Canada. She also teaches part time in the Communicative Disorders Assistant program

at Lambton College. Before her work in a school board she worked with preschool children at a local Children’s Treatment Centre. Tanya has always had a passion for literacy and wrote both her undergraduate and graduate theses in the area of reading. In her work as a school board employee, she now works towards improving the literacy skills of students through collaboration with teachers and other school staff as well as the greater community. Tanya has participated in various collaborative inquiries within her school board, working with teachers to help improve teacher-SLP collaboration as well as current practice in school settings. Tanya is on the planning committee of the ever growing and popular “Sowing the Seeds of Literacy” conference held annually in Sarnia, ON. This conference supports early childhood educators and primary teachers in learning current research and strategies to improve literacy outcomes in the children they teach. Tanya is also excited to be a member of the new Lambton Literacy Action Committee, which will bring together various community members and service providers and strive to take preventative measures throughout the area to improve the literacy skills of children.

A life-long learner, Tanya is a technology and social media enthusiast, known on twitter as @SLPTanya. She has a blog that features an entire series on professional social media use for SLPs and audiologists and has spoken nationally and internationally on the topic of sharing information, resources, and collaboration with other professionals in a multidisciplinary context through social media. In her spare time, Tanya enjoys spending time with her family, playing with technological gadgets and cross country running.

Acknowledgements

First and foremost, thanks to Barbara Fernandes and Smarty Ears Inc. for publishing this app. Special thanks goes to Mary Huston, SLP, who helped test items in the assessment, provided feedback, and helped edit and proofread more than I should have asked of her. Thanks also to SLPs Janelle Albrecht, Shareka Bentham, and Skye Angus Leal for helping me test the items in this assessment with a global context and cross section of students and providing me with feedback. Another special thanks to Kimberly Murphy, a SLP with a ton of literacy experience, who gave me feedback on my original ideas when the app was in its infancy. To my ever supportive and fantastic team of SLPs at my work, thanks so much to Kristalee Baragar, Susan Ritchie, and Glenda Ebert who also tested out the profile items on students and provided valuable feedback and support. I’d also like to thank more fabulous team members, CDAs Kim DiCocco and Elizabeth Thompson, who supported me and cheered me on in writing this app over the past year. Thanks most of all to my husband, Chris Coyle, for putting up with me as I spent time working on this project and for quietly cheering me on.

References

- Andreassen, M., & Smith, S. (2008). *Age of acquisition*. Retrieved from <http://phonologicalawareness.org/11.html>
- Carroll, J., & Snowling, M. (2004). Language and phonological skills in children at high risk of reading difficulties. *Journal of Child Psychology and Psychiatry*, 45(3), 631-640.
- Catts, H. (1993). The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research*, 36, 948-958.
- Clarke-Klein, S., & Hodson, B. (1995). A phonologically based analysis of misspellings by third graders with disordered-phonology histories. *Journal of Speech and Hearing Research*, 38, 839-849.
- Gillon, G. (2000). The efficacy of phonological awareness intervention for children with spoken language impairment. *Language, Speech, and Hearing Services in Schools*, 31, 126-141.
- Gillon, G. (2002). Follow-up study investigating the benefits of phonological awareness intervention for children with spoken language impairment. *International Journal of Language & Communication Disorders*, 37(4), 381-400.
- Gillon, G. (2005). Facilitating phoneme awareness development in 3- and 4-year-old children with speech impairment. *Language, Speech, and Hearing Services in Schools*, 36, 308-324.
- Johnson, K. L., & Roseman, B. A. (2003). *The source for phonological awareness*. East Moline, IL: Linguistics, Inc..
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Retrieved December 13, 2011, from <http://www.nichd.nih.gov/publications/nrp/upload/report.pdf>
- Paul, R. (2007). *Language disorders from infancy through adolescence: Assessment & intervention* (3rd ed.). St. Louis: Mosby, Inc.
- Schrieber, L. (2008, May 19). Development of phonological awareness skill. Retrieved from <http://www.speechpathology.com/articles/development-of-phonological-awareness-skill-1200>
- Stanovich, K. (2000). *Progress in understanding reading: Scientific foundations and new frontiers*. New York: Guilford Press.

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