## ABRACADABRA

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INTRODUCTION TO ABRA

## Introduction to ABRACADABRA

### What is ABRACADABRA?

ABRACADABRA (**A** Balanced Reading Approach for Children Designed to Achieve Best Results for All, affectionately known as ABRA) is a free, interactive literacy program designed for primary students, their educators, and parents and is available on the web or as part of the Learning ToolKit+ (LTK+). Taking a balanced reading approach, ABRA aids beginning readers through literacy activities and digital stories. Teachers are also supported through ABRA's assessment capabilities and resources meant to provide professional development training. Currently ABRA contains 33 alphabetic, fluency, comprehension, and writing activities linked to 20 interactive stories and 15 stories written by schoolchildren.

### French ABRACADABRA

Recently, ABRA was adapted into French for the development of early French literacy skills. Currently, the French ABRA version contains 15 alphabetic, fluency and comprehension activities linked to 15 interactive stories. An assessment module is also available for teachers to get a student or class portrait for student(s)' progress within the program.

### Why ABRA?

For decades, researchers and practitioners worldwide have been searching for the key to unlock the mysteries of how children learn to read and write. To date, considerable evidence has been collected that suggests children must not only be exposed to a variety of instructional methods, but that these experiences must be presented in explicit and systematic ways if literacy is to be fully attained.

Research shows that children's engagement and motivation affect their academic success. While skills and drills are important components in literacy achievement, these exercises must be done in meaningful and engaging ways for learners. This involves providing appropriate opportunities, texts, and activities wherein students can apply what they have learned in authentic contexts.

The Centre for the Study of Learning and Performance (CSLP) continues to develop ABRA in an effort to help battle the alarmingly high percentage of low ability readers in countries throughout the world. These developments are a direct result of a multidisciplinary team of educational professionals who continue to guide ABRA. This team consists of researchers, policy makers, school administrators, language arts consultants, and teachers from across the world whose input helps steer the overall direction of this project. The CSLP continues to practice its policy of working with the educational community and partnering with ABRA stakeholders to develop the best possible resource for the field.



### **Evidence-Based Practice**

The recommendations from the National Reading Panel and other front-runners in the field of language and literacy have remained the foundation of the ABRA software.

Throughout the years about 20 validation studies have been performed to explore the impact of ABRA on various facets of children's reading. The studies feature broad international contexts including Canada, Australia, Kenya, Hong Kong and Mainland China, and England. Some of these are modest studies while others are large-scale and longitudinal investigations complete with random assignment of classes to ABRA and control groups. Independent research and evaluations (McNally, Ruiz-Valenzuela, & Rolfe, 2016; Bailey, Arciuli, & Stancliff, 2016; 2017) have also contributed to our knowledge base on ABRA efficiency.

We have summarized the findings of the high-quality fifteen ABRA studies conducted between 2008 - 2017. From the total of about 7,000 students who participated in these studies, 3,153 elementary students were exposed to ABRA instruction. Although students in regular classrooms were the focus of these studies, a few explored ABRA effects on the literacy skills of students with special needs such as autistic spectrum disorder (Bailey, Arciuli, & Stanclifff, 2016; 2017).

In the studies conducted, ABRA and control groups were compared 91 times on different reading outcomes including phonemic awareness, phonics, fluency, vocabulary and reading, and listening comprehension. We used average effect sizes as a simple way to quantify the difference between ABRA and control groups on the six reading-related skills. An effect size shows the extent to which average students' reading improvement in ABRA classes would exceed that of students from non-ABRA control classes. These metrics can be translated into an average percentile gain that suggests how an average student with the score of 50 would increase his or her percentile scores after ABRA had been part of instruction.

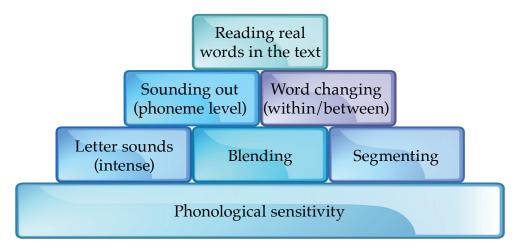
The effects of ABRA were found to be positive on all six reading-related outcomes and particularly noticeable in phonics, phonemic awareness, reading and listening comprehension. Specifically, the percentile scores of an average student grew from 50 to 65 in phonemic awareness (effect size: +0.38), to 58 in phonics (effect size: +0.19), to 57 in reading comprehension (effect size: +0.18), and to 61 in listening comprehension (effect size: +0.27). For more details on the ABRA studies, please visit:

www.concordia.ca/research/learning-performance/tools/learning-toolkit/abracadabra/researchers



### **Phonological Foundation**

A solid phonological foundation is necessary to create a good literacy program and is a good predictor of future reading success. This foundation includes phonemic awareness, which is the ability to identify and manipulate sound units in words, and phonics, which involves connecting letters or groups of letters to their specific sound(s).



## How to Use the Tool

### Mastery

In ABRA, students are said to have mastered a particular activity when the rate of correct response is 90%-100% for three consecutive entries. When this is achieved, they are encouraged to move on to the next level. It is highly recommended that teachers use the Assessment Report on a regular basis to monitor progress of their students.

### **Extension Activities**

ABRA has been designed to be used by teachers in their classrooms as an instructional tool. Teachers will connect the skills being learned online to those being learned in other aspects of their literacy instruction curriculum. It is, therefore, important to help create a link between what the students are learning in ABRA and how they might use these skills in their daily literacy. There are many different ways that the system can be used. There are online components the teacher can use with a projector, as well as various printable resources and flashcards.

### PUPIL MODULE

## **Student Module**

### Accessing ABRACADABRA

### **LTK+ LOBBY PAGE**

The lobby page will display certain tools depending on the level set by the LTK+ administrator. Early Years teachers should have access to Level 1. These teacher will have access to:

- ABRACADABRA .
- ELM •
- **e**PEARL •
- READS

Click on the icon to access the tool. In this case, click on ABRACADABRA.

*Tip*: If ABRA is not viewed on the LTK lobby, the account might not be set to level 1 or 2. To change level: Manage  $\rightarrow$  My Account  $\rightarrow$  My ePEARL Account. If ABRA is still not being viewed, please contact the system administrator as ABRA may be turned off at the administrator level.



🔰 Learning Tol Kit





ENIFR

code3

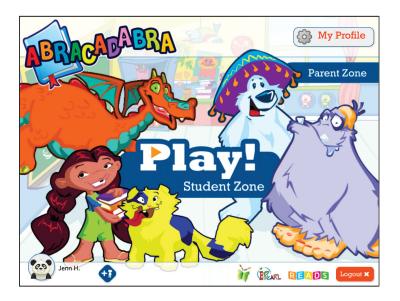
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#### **STUDENT MODULE**

Press *Play!* to access the activities and stories.

In the bottom-right corner, this screen provides shortcuts to ePEARL (student's portfolio) and READS (repository of electronic books).



### **MY PROFILE**

Clicking on the *My Profile* button (from the splash page) can change the icon associated with the account. This icon is the graphical representation of the user or the user's character.



To change the icon, click on an alternative image and then select the accept button.



### **ADVENTURE ROOM**

Once students click on *Play!*, they are brought to the Activities and Stories page, called the *Adventure Room*. There are four categories of activities and four story genres to choose from.



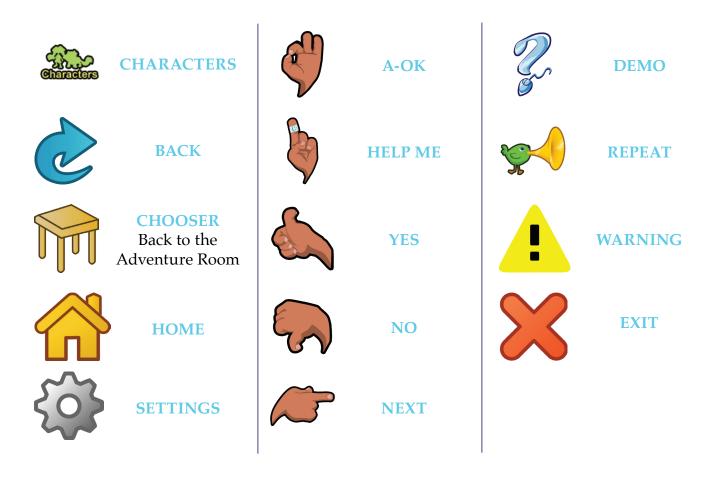
### Add a User

Students can add up to three classmates and do activities and read stories with them. When students take turns working on an activity, they can click on their avatar at the bottom of the screen, which will then display them as the active user.



### **Navigational Icons**

As students go through ABRA, they will meet these navigational icons. Teacher and students should be familiar with these icons to make their experience with the software enjoyable.



# PUPIL MODULE

Each character is associated with a reading skill. In the Characters' section, accessible through the Student Module, a biography is presented for each of the characters, associating them with their preferred reading skill.



### Activities

There are a total of 33 activities and 20 stories in this section. Activities are leveled and some are practiced within the context of a story. Each activity is preceded by a brief demo.

### Stories

The Student Module is the heart of the ABRA software. All instructional activities are developmentally appropriate and revolve around a progressive model of instruction providing foundations in four literacy domains: Alphabetics (Sounds, Letters, and Words), Fluency (Reading), Comprehension (Understanding the Story), and Writing. Built-in scaffolding and multiple levels of difficulty allow for flexibility.





### Genres

ABRA helps expose children to different literary genres. A genre can be defined as a category of literature that is distinguished from others by characteristics such as style, form and content. Research shows that the more experience children have with different genres the more successful they will be when reading and writing in these various genres.

ABRA features four genres:



Folk tales are oral stories that have passed from generation to generation. They explain issues relating to life, nature, values, culture, etc. Fairy tales are make believe stories that take place in a distant land and often feature magical or imaginary creatures.

Writing that uses verse and rhymes to awaken the imagination and emotion as the reader interacts with the text.

Made up or "not true" stories created by an author.



True stories about real people, places, events.

### Choosing an Appropriate Reading Level

Make sure to assign the appropriate level or else the student will feel discouraged. Generally speaking, if a student can read the text with 90-95% accuracy then the text is at the right level of instruction.

90% accuracy or less	Too difficult / frustration
90-95% accuracy	Perfect / appropriate level for instruction
95% accuracy or more	Proficient / independent reading

### **Student Stories (Created and Written by Students)**

A total of 15 students' stories are available. These stories were written by students as part of a story contest. These stories are recorded in Canadian, Australian and Kenyan accents for the entertainment and education of students worldwide. Their levels of difficulty vary.

ALPHABETICS



## ABRA Activities: Sounds, Letters, and Words (Alphabetics)

### What Is Alphabetics?

Alphabetics is the ability to associate sounds with letters and use these sounds to create words. The sounds associated with letters are referred to as phonemes (smallest units of spoken language) while the written letters associated with these sounds are called graphemes. There are 26 graphemes in English but there are over 40 phonemes.

### **Stages of Alphabetics**

Children begin their path to reading by developing their phonemic awareness by learning to distinguish between different sounds, or phonemes. Through practice and modeling students begin to associate these sounds with print and recognize the correspondence between letters and sounds.

The ability to manipulate these phonemes, either individually (letter by letter) or in chunks such as in rhyming families, is a more sophisticated skill in the area of phonics. Here, the learner begins to segment words by breaking them apart into units that make them easier to read and then blending these units together. Decoding (the ability to interpret symbols, such as letters) then begins to take place as the learner is able to access strategies to read words.

### Why Is Alphabetics Important?

Research suggests that children who do not have a solid foundation in these alphabetic principles are less skilled readers as they progress through school. Providing children with multiple opportunities to practice sounds and words is crucial for growth in the next steps in literacy, fluency, and comprehension skills. In addition, research shows that it is more advantageous when alphabetic skills are presented with various phonetic or writing activities.

ALPHABETICS

### How Does ABRACADABRA Support Alphabetics?

ABRA has 17 different activities specifically aimed at reinforcing the alphabetic principles. Each activity has multiple levels so that teachers in classrooms with a wide range of student needs can match student skill and activity difficulty level. There is scaffolding built within each activity to encourage autonomous use of the tool.

Many of the alphabetic activities are associated with the stories embedded in the software. This helps to build the context necessary for practicing specific vocabulary and all reading related skills. Many activities are appropriate for students who are struggling or at the beginning stages of alphabetic skills development. These activities focus predominantly on listening skills, auditory discrimination and letter naming. For those students who are ready for more advanced practice, the activities support word family manipulation, decoding games, and blending tasks with text support. Of course, there are fun games that are appropriate for all levels and provide practice such as Letter Bingo and Letter Sound Search. Detailed information on each activity is provided in the following pages.

PRE-ALPHABETIC	PHONEMIC AWARENESS	PHONICS
Alphabet Song	Auditory Blending	Basic Decoding
Animated Alphabet	Auditory Segmenting	Same Word
Letter Bingo	Blending Train	Word Changing
Letter Sound Search	Matching Sounds	Word Counting
	Rhyme Matching	Word Families
	Same Phoneme	Word Matching
	Syllable Counting	



### **ACTIVITY OBJECTIVE**

The student will practice the alphabet by singing the alphabet song.

### **GROUP FACILITATION TIPS**

Use a projector and speakers to work on this activity with the entire class.

#### **CONTENT/LEVELS**

Level 1: Sing it with us. Level 2: Keep singing even when we don't. Level 3: Sing by yourself, karaoke style.

### LINKED STORIES

This is a story-independent activity.

### Animated Alphabet

### **ACTIVITY OBJECTIVE**

Students will be able to hear the sounds made by certain single and clustered letters. These letters will also be used in fun sentences.

### **GROUP FACILITATION TIPS**

This activity can be done by a whole class or as an individual activity. If there are letters or sounds students are learning or practicing, this activity can be used to support their learning.

#### **CONTENT/LEVELS**

The first page presents the 26 letters of the alphabet. The second page has 11 consonant and vowel clusters for more advanced practice.

#### **LINKED STORIES**

This is a story-independent activity.









### Auditory Blending



### **ACTIVITY OBJECTIVE**

Given a phonemic breakdown, the students will identify a word; i.e., /c//a//t/ = "cat".

### **GROUP FACILITATION TIPS**

Students can do this activity in pairs and take turns (one word per turn) to tell the word and find its matching picture.

#### **CONTENT/LEVELS**

Level 1: 2-sound (phoneme) words. Level 2: 3-sound (phoneme) words. Level 3: harder 3-sound words. Level 4: 4-sound words. Level 5: harder 4-sound words. Level 6: 5-sound words. Level 7: harder 5-sound words.

#### **LINKED STORIES**





**ALPHABETICS** 

#### **ACTIVITY OBJECTIVE**

Given the pronunciation of a word, e.g. "cat", the student will identify the breakdown /c/a//t of the word.

### **GROUP FACILITATION TIPS**

Students can do this activity in pairs and take turns (one word per turn) listening to a word then finding the spaceship that has the breakdown of the given word.

#### **CONTENT/LEVELS**

Level 1: 2-sound (phoneme) words. Level 2: harder 2-sound (phoneme) words. Level 3: 3-sound words. Level 4: harder 3-sound words. Level 5: 4-sound words. Level 6: harder 4-sound words. Level 7: 5-sound words.

#### **LINKED STORIES**





### **Basic Decoding**

### **ACTIVITY OBJECTIVE**

Given the visual representation of a word, the student must say the sounds of the letters then blend them together to read the word. They must then find the picture to match the word read.

#### **GROUP FACILITATION TIPS**

This activity combines the sounding out of letters and blending them to make words. Teachers or another student can assist with scaffolding or picture matching when necessary.

#### **CONTENT/LEVELS**

Level 1: 2-sound (phoneme) words. Level 2: 3-sound (phoneme) words. Level 3: harder 3-sound words. Level 4: 4-sound words. Level 5: harder 4-sound words. Level 6: 5-sound words. Level 7: harder 5-sound words.

#### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Dove and the Mell The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff When I Open My Eyes



ALPHABETICS

## Blending Train

### **ACTIVITY OBJECTIVE**

Given the phonemic breakdown of a word, students will identify the word it makes; e.g., /r/ /o/ /d/ = "rod".

### **GROUP FACILITATION TIPS**

Students can do this activity in pairs. They take turns (one word per turn) listening to the breakdown of a word then putting the sounds together to tell the word they make.

#### **CONTENT/LEVELS**

Level 1: 2-sound (phoneme) words. Level 2: harder 2-sound (phoneme) words. Level 3: 3-sound words. Level 4: harder 3-sound words. Level 5: 4-sound words. Level 6: harder 4-sound words. Level 7: 5-sound words. Level 8: harder 5-sound words.

#### **LINKED STORIES**





#### 17

### Letter Bingo

### **ACTIVITY OBJECTIVE**

Given the pronunciation of the letter name, the student must determine if the letter is on his/her bingo card.

### **GROUP FACILITATION TIPS**

Teachers can use this activity to see if students can match the letter name with its corresponding grapheme. This can be a group or individual activity. If played as a group, students should take turns finding one letter.

### **CONTENT/LEVELS**

Level 1: Upper case letters. Level 2: Lower case letters. Level 3: Challenge - Often problematic lower case letters (e, d, p, q, g, l, m, n, u, v).

#### **LINKED STORIES**

This is a story-independent activity.

### Letter Sound Search

### **ACTIVITY OBJECTIVE**

Given the pronunciation of a letter sound, the student must identify and find its associated letter.

### **GROUP FACILITATION TIPS**

This activity can be used in pairs or by an individual student. If done in pairs, a student finds

one letter then lets the other student have a turn. If the student cannot find it, the other student can give him or her a clue as to where the letter is; e.g., "it is in a corner".

### **CONTENT/LEVELS**

Level 1: 10 letters camouflaged in an easy background. Level 2: 14 letters camouflaged in a medium background. Level 3: 14 letters camouflaged in a hard background.

### LINKED STORIES

This is a story-independent activity.









ALPHABETICS



### ACTIVITY OBJECTIVE

The student will identify sounds that are the same.

### **GROUP FACILITATION TIPS**

In this activity, students can take turns matching a set of sounds. As there is only two sounds to match per set, it won't take too long per turn.

### **CONTENT/LEVELS**

Level 1: Distinguishable sounds. Level 2: Similar sounds.

### LINKED STORIES

This is a story-independent activity.

### **Rhyme Matching**

### **ACTIVITY OBJECTIVE**

The student will identify words that rhyme.

### **GROUP FACILITATION TIPS**

Students can work as a group to match rhyming words. Students take turns controlling the computer and matching one or two pairs of words per turn.

#### **CONTENT/LEVELS**

8 cards: 4 pairs of CVC words.12 cards: 6 pairs of CVC words.16 cards: 8 pairs of CVC words.

#### **LINKED STORIES**







### Same Phoneme

#### **ACTIVITY OBJECTIVE**

The student will be required to distinguish between phonemes (letter sounds) that are the same or different.

### **GROUP FACILITATION TIPS**

This activity can be used by individuals or in pairs (alternating after doing a pair of words). As well, it can be done as a whole class activity where students are asked to close their eyes and raise their hands when the teacher calls out two sounds and then ask "sounds the same" or "sounds are different."

#### **CONTENT/LEVELS**

All letter sounds are presented in this activity.

#### **LINKED STORIES**

This is a story-independent activity.



ALPHABETICS



#### **ACTIVITY OBJECTIVE**

Students will be able to distinguish between words that are the same or different.

#### **GROUP FACILITATION TIPS**

This activity can be done individually or in pairs. This is a great activity to test students' listening ability.

#### **CONTENT/LEVELS**

Level 1: First letter is different (e.g. cat and rat). Level 2: Last letter is different (e.g. bad and bat). Level 3: Middle letter is different (e.g. fan and fin).

#### **LINKED STORIES**





### Syllable Counting



### **ACTIVITY OBJECTIVE**

The student will be able to count the number of syllables in a word and feed the yeti (friendly folklore animal) the corresponding number of popsicles.

### **GROUP FACILITATION TIPS**

This activity can be done individually, in groups, or as a whole class activity. The game helps the teacher teach as well as evaluate students' ability to hear and count how many sounds are in a word. Clapping can be encouraged to support the counting.

#### **CONTENT/LEVELS**

Activity presents 1 to 4 syllable words only.

### LINKED STORIES





### **ACTIVITY OBJECTIVE**

The student must change individual letters in a word to form a new word.

### **GROUP FACILITATION TIPS**

This activity can be done individually or in pairs. If a child makes a mistake, the teacher or another student can encourage the player to pay attention to the required sound.

### **CONTENT/LEVELS**

Level 1: CVC (Consonant-Vowel-Consonant) words. Only the first letter is manipulated. Level 2: CVC words. All letters are manipulated.

Level 3: CVC words with long vowel sounds. Only the first letter is manipulated.

Level 4: CVC words with long vowel sounds. All letters are manipulated.

#### **LINKED STORIES**





### Word Counting

### **ACTIVITY OBJECTIVE**

The student will be able to count the words in a sentence and feed the yeti (friendly folklore animal) the corresponding number of snowballs.

### **GROUP FACILITATION TIPS**

This activity can be done individually, in groups, or as a whole class activity. This activity is useful when the teacher wants to ascertain whether beginning readers hear/listen well, know what words are, and can tell how many words are in a sentence. This information is particularly useful at the beginning of the school year. Clapping can be encouraged to support the counting.

#### **CONTENT/LEVELS**

Level 1: 2, 3, and 4 word sentences (40%, 40%, and 20%) Level 2: 2, 3, 4, and 5 word sentences (20%, 30%, 30%, and 20%).

### **LINKED STORIES**

Darryl! Don't Dawdle Henny Penny How a Bean Sprouts The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff





ALPHABETICS



### **ACTIVITY OBJECTIVE**

The student will be able to create different words from the same word family.

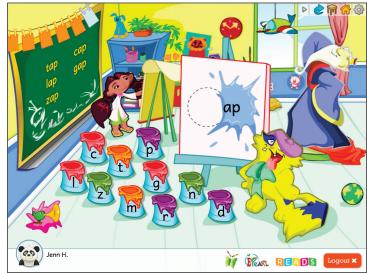
### **GROUP FACILITATION TIPS**

The teacher can choose a specific word family they want students to work on or have the computer randomly pick the word families.

### **CONTENT/LEVELS**

Level 1: Single letter and phonemes. Level 2: Single and clustered letters and phonemes. Advanced: The teacher or the student chooses the word family on which to work. Category 1 contains two letters (e.g. \_at, \_in, \_ot), while category 2 contains three or more letters (e.g. \_est, \_ick, \_ight).

#### **LINKED STORIES**





### Word Matching

### **ACTIVITY OBJECTIVE**

The student will match words that have the same beginning or ending sound.

### **GROUP FACILITATION TIPS**

Students can work in pairs to match words. If they get a pair correct, they continue. If they get it incorrect, they hand over control of the mouse to another student.

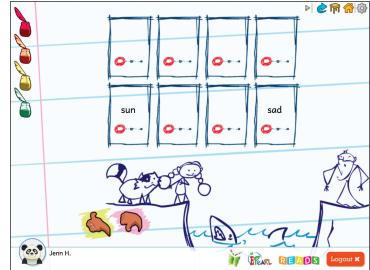
### **CONTENT/LEVELS**

Students have the choice of playing with 8 cards (4 pairs), 12 cards (6 pairs), and 16 cards (8 pairs).

Level 1: Same beginning sounds. Level 2: Same ending sounds.

### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff When I Open My Eyes



ABRICADABRA

ALPHABETICS

FLUENCY

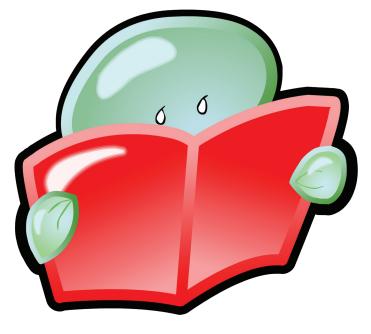
## **ABRA Activities: Reading (Fluency)**

### What Is Fluency?

Fluency is ability to read with accuracy, speed, and expression. Fluency readers not only decode words with little or no effort (automaticity), they also read with at a correct pace and with proper expression. Strong fluency skills are key are understanding the meaning of texts.

### Why Is Fluency Important?

Research suggests that students who struggle to acquire the skill of automatically reading words will struggle with being able to attend to the meaning



of a text. In addition, children who have trouble reading accurately at an appropriate pace tend to experience motivational problems. The reading load increases as students' progress through the grade levels, making lack of fluency a major obstacle to school success.

### How Does ABRACADABRA Support Fluency?

Activities in ABRA allow for extensive practice in reading fluency. The six<sup>\*</sup> activities cover all of the sub-skill areas, including expression and speed. Through games, students can test their pace against ABRA's cartoon characters. Good reading models are built into the story-related activities so students can hear appropriate examples and evaluate if, how, or where they can improve. In addition, the program models how to decode words within the context of a story, thus giving students access to consistent and readily available help. The more learners are able to practice a specific skill, the better the chance they have of developing fluency.

Accuracy	Expression	High Frequency Words
Reading Practice	Speed	Students' Stories *
Tracking		

\* *Note*: *The Students' Stories are not counted as a Reading activity, but are included in this section to help support students in building this skill.* 

### Accuracy

### **ACTIVITY OBJECTIVE**

After listening to the computer read a passage, the student must read the same page accurately.

### **GROUP FACILITATION TIPS**

This activity should be done individually. As the computer reads, the student follows. When the child reads, s/he can click on a word if help is needed. At the end of each passage, the words clicked will be reviewed in a game-like feature to help the student become more familiar with them.

### **CONTENT/LEVELS**

This activity can be done at all levels.

### LINKED STORIES

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Dove and the Well The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes



FLUENCY



### **ACTIVITY OBJECTIVE**

The computer reads a text using different expressions and the student must decide if the passage was read appropriately. The student must then read the same text practicing correct use of expression.

### **GROUP FACILITATION TIPS**

Before beginning this activity, provide students with examples of expressive reading done well and poorly. For example, explain how a story should be read if a person is happy, sad, surprised, etc. ABRACADABRA does not teach punctuation marks, so the teacher should guide students to pay attention to these marks because they assist in knowing how to read a passage well.

### **CONTENT/LEVELS**

This activity is appropriate for all reading levels. Even with picture books, reading or speaking with proper expression should be modeled when texts or pictures warrant it. For

example, if a fire scene is illustrated, speak about it with some excitement or emotion such as sadness or fear in your voice.

#### **LINKED STORIES**





### High Frequency Words

### **ACTIVITY OBJECTIVE**

Given a list of high frequency words, students will have to read them out loud within a certain time period before another word pops up.

### **GROUP FACILITATION TIPS**

Students can do this activity in groups. Have students line up and take turns reading a word. Remind students that their word recognition speed ability is an important element in their becoming good readers.

### **CONTENT/LEVELS**

Level 1: A set of four words are randomly presented four times with gradually less time to read them. Level 2: A set of seven words are randomly presented four times with gradually less time to read them.

### **LINKED STORIES**

How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen







### **Reading Practice**

### **ACTIVITY OBJECTIVE**

This activity allows children to practice reading different stories. Children can work alone, in pairs, or in small groups.

### **GROUP FACILITATION TIPS**

Research shows that children build fluency skills when they read stories out loud several

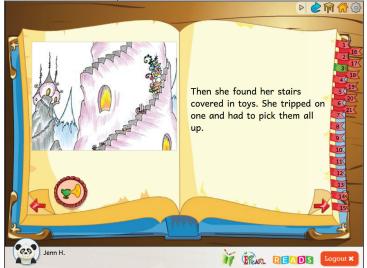
times while receiving feedback from a teacher, peer, or parent. Try pairing children, so they can take turns reading the story and getting feedback from the listener.

### **CONTENT/LEVELS**

All story levels (easy to advanced) can be used in this activity.

### LINKED STORIES

Invisible Alligators The Brave Monkey Pirate The Wiener Dog Magnet





### Speed

### **ACTIVITY OBJECTIVE**

Using an algorithm of good reading speed, the computer will monitor a student's reading rate. The student will read a given text at an appropriate pace.

### **GROUP FACILITATION TIPS**

This game is best played after students are familiar with a story or are comfortable with reading or sounding out words. The game can be done with one to four players. Each student chooses a character and names it. The computer selects who will read and monitors the person's reading rate. If a student needs help, they can click on the word but this slows down her/his reading speed.

#### **CONTENT/LEVELS**

All story levels (easy to advanced) can be used in this activity.

#### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes



FLUENCY

### Students' Stories

**FLUENCY** 

### **ACTIVITY OBJECTIVE**

Students can choose amongst 15 stories written by students and narrated in three distinct English accents: Canadian, Australian, and Kenyan. This can be used as a further opportunity to practice fluency skills and expression in varying contexts.

### **GROUP FACILITATION TIPS**

Students can read alone, in pairs or in small groups. Teachers can ask students to guess where they think the accent is from. Cross-curricular teaching and an opportunity to learn about other cultures and contexts are an important element of this activity.

#### **CONTENT/LEVELS**

All story levels (easy to advanced) can be used in this activity.

#### **LINKED STORIES**

A Magical Adventure A Tall Tale Adventures of Bertie Balloon Animal Antics Counting Cuddly Koalas Fishing Wonder Lea's Birthday Party Little Wing Perfect Little Christmas Tree Rhyme Time The Birthday Disaster The Littlest Mouse The Story of Elli and Ella Wally's Vacation Why Koalas Live in Trees





### Tracking

### **ACTIVITY OBJECTIVE**

While reading a story, the student will be able to read with one-to-one correspondence and without skipping words.

### **GROUP FACILITATION TIPS**

Students can take turns reading the story and controlling the computer. Remind students that they can click on the words that they do not know so that the computer can read them.

#### **CONTENT/LEVELS**

This activity is appropriate for all stories and levels.

#### **LINKED STORIES**

Canadian Wild Animals Counting to Ten Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... My Town The Dove and the Ant The Four Seasons The Frogs and the Well The Fruit Family The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes Where am I?



FLUENCY

COMPREHENSION

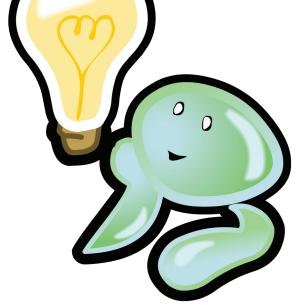


# ABRA Activities: Understanding the Story (Comprehension)

### What Is Comprehension?

Comprehension is the cognitive process in which the reader interacts with a text in an attempt to ascertain its meaning. Reading comprehension is the culmination of all the students' reading skills; it involves good oral comprehension, vocabulary, and decoding skills. Depending on the grade level of the students, the importance of each of these prerequisite skills varies. Comprehension is also affected by prior knowledge, which can help children relate to various texts.

### Why Is Comprehension Important?



Reading for meaning is the ultimate goal of learning how to read. This is the element that takes children from being good decoders to being good readers and literate beings. It is therefore understandable that the acquisition of reading comprehension is a complex, and vital, process.

### How Does ABRACADABRA Support Comprehension?

The tool focuses on developing eight specific skills that contribute to overall comprehension. The activities each have various levels and range from simpler tasks, such as placing the elements of a well-known story in order, to summarizing an entire text. Other activities allow students to respond to a question prompt, to think critically about a text and to respond appropriately given the context of the story. Additional vocabulary activities help students to build a bank of words that they can read (decode) and understand.

COMPREHENSION

## NERACADAERA

### How Do I Teach Comprehension?

Research suggests that there are several strategies that have a positive influence on children's ability to understand what they read. The National Reading Panel suggests practicing skills such as asking and generating critical questions, using story maps, and monitoring comprehension through cooperative learning opportunities.

There is also evidence that modeling appropriate strategies, such as context clues and providing multiple opportunities to read texts, helps children develop their comprehension skills. Also, students should have time to read individually, with peers and with adults.

COMPREHENSION STRATEGIES	VOCABULARY
Comprehension Monitoring	Vocabulary
Prediction	Vocabulary (ESL)
Sequencing	
Story Elements	
Story Response	
Summarizing	



**COMPREHENSION** 

### **Comprehension Monitoring**

### **ACTIVITY OBJECTIVE**

As they are reading a story, students identify on each page the incorrect word, meaning the one that does not make sense.

This activity is best done after children are familiar with a story so they can tell which word does not make sense in the text.

#### **GROUP FACILITATION TIPS**

Students can work as a group (reading the story and looking for the nonsense words) and

take turns controlling the computer. If a word is not known, they can click on it to get help.

### **CONTENT/LEVELS**

There is one nonsense word per page in every story.

### **LINKED STORIES**

Darryl! Don't Dawdle Henny Penny How a Bean Sprouts The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff





COMPREHENSION

### Prediction

### **ACTIVITY OBJECTIVE**

Based on information from the story, the student will predict future events. They should also be asked to justify their responses.

### **GROUP FACILITATION TIPS**

This activity can be done as an oral or written project, individually, group, or whole class. Students can read the story as a group using the tracking function or have the page read by the computer using the audio icon. If done orally, encourage students to discuss their ideas

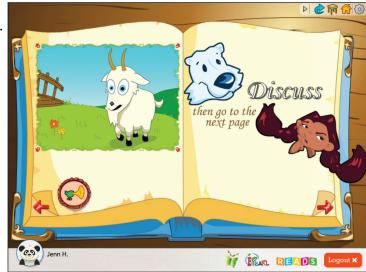
with peers. The teacher can add questions that may not be embedded in the program.

#### **CONTENT/LEVELS**

Prediction questions are asked at the end of certain pages in the story.

#### **LINKED STORIES**

Henny Penny The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall







### **ACTIVITY OBJECTIVE**

After reading a story, the student will place story events in their correct order.

### **GROUP FACILITATION TIPS**

Students can work as a group (reading the story and looking for the nonsense words) and take turns controlling the computer. If a word is not known, they can click on it to get help.

#### **CONTENT/LEVELS**

Level 1: 3 story events are displayed in random order. Level 2: 5 story events are displayed in random order.

#### **LINKED STORIES**

Henny Penny How a Bean Sprouts The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall





COMPREHENSION

### Story Elements

### **ACTIVITY OBJECTIVE**

The students must answer questions about events that took place in a story. They are given multiple-choice questions and must choose one of three possible answers.

### **GROUP FACILITATION TIPS**

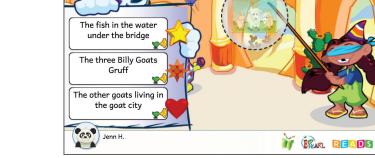
This activity can be done individually or in small groups. When working in groups, they can take turns selecting answers and hitting the piñata.

#### **CONTENT/LEVELS**

Students are asked six questions about the story. Because there are audio prompts to assist, this activity can be done by all students once they are familiar with the story.

#### LINKED STORIES

Darryl! Don't Dawdle Henny Penny The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall



Who were the main characters in the story?





### **ACTIVITY OBJECTIVE**

Students are given open-ended questions about the story that they will discuss with one another.

### **GROUP FACILITATION TIPS**

This activity should be done in small groups. After students have discussed a question, they can play an online hockey game in which they take turns scoring goals.

#### **CONTENT/LEVELS**

Six questions are presented in a set—three of which are general while the remaining three are story-specific.

#### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes





### Summarizing

### **ACTIVITY OBJECTIVE**

The student will answer story-related questions to help him/her summarize the story at the end.

### **GROUP FACILITATION TIPS**

This activity is best done in pairs or in small groups. Students read the story (using the tracking function) or have the pages read by the computer (audio feature). If necessary reword the question and encourage discussion amongst the students.

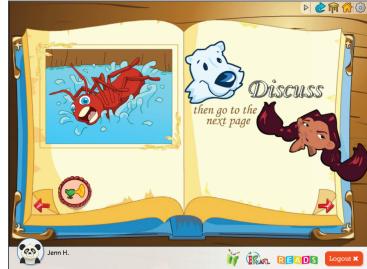
Summarizing prompts are not available for all stories, but teachers can develop their own questions for ABRA and READS stories.

### **CONTENT/LEVELS**

Story related questions are asked after certain pages in the story. Students must identify key elements in the story and monitor their thinking so they can summarize the story in a meaningful way.

### LINKED STORIES

Henny Penny The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall



COMPREHENSION



### Vocabulary

### **ACTIVITY OBJECTIVE**

Given the definition of a word, the student must determine which of two sentences uses the word appropriately.

### **GROUP FACILITATION TIPS**

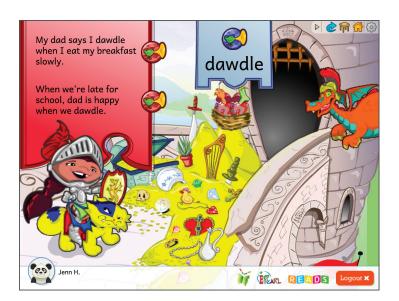
This feature can be used to preview vocabulary words from a particular story before reading it or to work with words from a story after it was read.

#### **CONTENT/LEVELS**

Vocabulary words are drawn from the individual stories.

#### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Frogs and the Well The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes





Vocabulary (ESL)

### **ACTIVITY OBJECTIVE**

The student will be able to match given words with their corresponding pictures, then use the words appropriately in given sentences.

### **GROUP FACILITATION TIPS**

This activity is best done individually or in pairs. If done in pairs, students can take turns controlling the mouse as they each do a set. The other student is there to support and provide assistance if necessary.

#### **CONTENT/LEVELS**

The first half of this activity gives students a set of five words and asks them to select the matching picture. The second part presents five incomplete sentences and the student must

select which of these words best fits the sentence.

#### LINKED STORIES

Darryl! Don't Dawdle Feelings Henny Penny I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes



COMPREHENSION

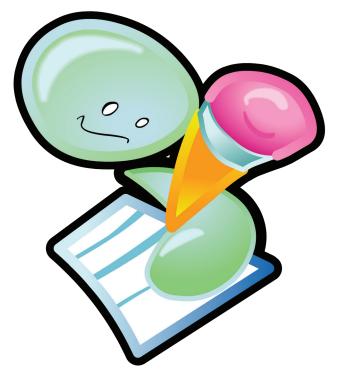
## **ABRA Activities: Writing (Typing)**

### What Is Writing?

Writing is defined as a system in which graphemes (letters or symbols) that represent a language are placed on a surface (encoded) to be read (decoded) by someone familiar with the code. It is a powerful, multifaceted tool for both personal and interpersonal communication.

### **Stages of Writing**

Writing progresses through at least seven different stages: from children giving meaning to their scribbles, pictures and drawings to conventional spelling. When children begin their formal schooling they may fall anywhere on this continuum in terms of writing ability.



### Why Is Writing Important?

Writing is a means by which we communicate with others. When children see different types of writing that is modeled and used around them, they soon want to engage in its production. Children usually begin writing (albeit through scribbling) before they start to read. Research shows that writing supports reading development and vice versa. When students encode their thoughts using conventional or invented spelling on paper or via a word processing program, they use skills that support reading and writing development. With the disparity that exists between the number of phonemes and graphemes in the English language (26 and over 40, respectively), students need explicit and systematic phonics instruction to learn how this code works and how to reproduce it. ABRA is a tool that supports this development.

### How Does ABRACADABRA Support Writing?

ABRA's writing component is designed for children to apply phonetic principles and their literacy experiences to the writing of words and sentences. Through two activities, children are asked to write words and sentences they have encountered in the different texts in the program.

Scaffolding mechanisms are built in so that students can complete the writing activities on their own. When words are spelled incorrectly, ABRA will provide prompts to support and encourage students until the words are spelled properly.

Spelling Sentences

Spelling Words

### **Spelling Sentences**

### **ACTIVITY OBJECTIVE**

The students will use keyboarding skills to spell words to make a sentence.

### **GROUP FACILITATION TIPS**

Before doing this activity, acquaint students with basic keyboarding skills, especially letters, the space bar, backspace, and enter keys.

This activity should be done after a story has been read because the words tested are storyspecific. It is best done by individual students or in pairs where they alternate having control of the keyboard.

#### **CONTENT/LEVELS**

Level 1: 2-word sentences. Level 2: 3-word sentences. Level 3: 4-word sentences. Level 4: 5-word sentences.

#### LINKED STORIES

Darryl! Don't Dawdle Feelings Henny Penny How a Bean Sprouts I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff Waterfall When I Open My Eyes









### **ACTIVITY OBJECTIVE**

The students will spell regular and irregular words using the keyboard.

### **GROUP FACILITATION TIPS**

Before doing this activity, acquaint students with basic keyboarding skills, especially letters, the space bar, backspace, and enter keys.

This activity is best done by individual students or in pairs where they alternate having control of the keyboard.

#### **CONTENT/LEVELS**

Level 1: 2-sound (phoneme) words. Level 2: harder 2-sound (phoneme) words. Level 3: 3-sound words. Level 4: harder 3-sound words. Level 5: 4-sound words. Level 6: harder 4-sound words. Level 7: 5-sound words. Level 8: harder 5-sound words.

#### **LINKED STORIES**

Darryl! Don't Dawdle Feelings Henny Penny I Can Move Like a... The Dove and the Ant The Frogs and the Well The Little Red Hen The Three Billy Goats Gruff When I Open My Eyes







## **Teacher Module**

The Teacher Module is designed to support teachers' use of ABRA. There are two components to this module: a Teacher Assessment feature, and a Teacher Resources site. Teachers can use the Assessment feature to follow students' progress in all of the activities. Teachers are encouraged to consult the resource site to learn more about the tool and to access classroom resources such as lesson plans. These teacher resources will be updated regularly.

### Assessment

The Teacher Assessment feature provides teachers with a breakdown of which activities their students have accessed, how much time was spent in the activities, and what errors their students made. Guidance on the skills targeted in each of the activities is also provided.

To access this feature, click on the cog icon from the Lobby Page.

### **GENERATING A REPORT**

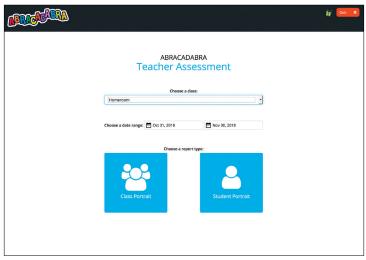
The first step requires the teacher to choose which class they want to get data about. The teacher selects this class from the drop-down list.

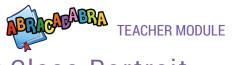
By default the last 30 days are selected in the calendar. The teacher can choose an alternative date range. The report will only present data for the date range selected on this page.

*Note: The LTK+ timestamps all students' activity using Coordinated Universal Time (UTC).* 

There are two report types: class portrait and student portrait.







### Class Portrait

### **CATEGORY OVERVIEW**

The activities are listed by their categories. Click on the tabs to select the category and see the activities of that category.

This page provides a quick indication of:

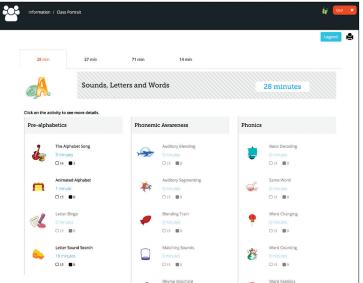
- Which activities students have attempted
- How much time they spent in each activity and in the category overall
- How many of the students have completed the activity at least once.

Click on an activity to see more details about the students' progress within that activity.

### **ACTIVITY DETAILS**

The activity detail page provides a wealth of information on how the class has interacted with the tool. This can include:

- Summary
- Access Statistics
- Correct/Incorrect Statistics
- Error Report
- Stories Read
- Words Clicked On
- Activity Insights
- Activity Connections
- Drop-down Filter of Overall or Level Information
- Complete/Incomplete Pie Chart.



LETTER SOUR	/ Class Portrait / Letter Sound Se		Quit X
Time Spent: 18 minut Times Accessed: 6 tin Average Time/Access	nes	Choose the level(s: Level 1 •	
Overall Statistics	Total		
Correct on first try	19	Complexe 2530 K3	
Correct on second attemp Help provided by the tool			
	0	transferre Transferre	
Ned Crowley (1 mistakes)	Go to profile		
Edmund Palka (3 mistake:	3) Go to profile	- Highdratizen	
Arusha Sunik (1 mistakes)	Go to profile	-	
Colette Tremblay (1 mista	Go to profile		
Activity Insights	•	м -	
Activity Connect	ions 🕶		

As each activity is different, the information on this page will change to align with what is relevant for the chosen activity.

By default, many of these sections are hidden when the teacher first accesses the activity details page. Click on the triangle buttons ▼ near the headings to show or hide content.

Summary: Clicking on the activity name will provide a description of the activity, focusing on its objective. If the activity has multiple levels, then a short description of each level is provided.

Access Statistics: The total number of times spent in the activity, number of times the activity was started, and the average time spent in that activity is listed.

Correct/Incorrect Statistics: List the total number of times that the students were able to answer correctly on the first attempt, on the second attempt after guidance was provided by ABRA, and incorrect answers. Not all of the activities provide a second

attempt to answer the question, so occasionally this table will only list a correct or incorrect count.

Error Report: Provides details of the errors made by students. Each student that made an error will appear in this section. Click on a student's name to see details about the types of errors they made in the current activity. These errors are listed in chronological order. The error tables will look different in each activity as the type of errors varies from activity to activity.

Clicking on the *Go to Profile* button will navigate to that student's portrait - to the current activity's detail page. Only information relevant to that student will display rather than the whole class.

Overall Statistics	Total
Correct on first try	39
Correct on second attempt Help provided by the tool	10
Incorrect	1

### Error Report -

dmund Pa	<mark>lka</mark> (3 mist	Go to profile Go to profile		
ohn Smith	(5 mistake			
Arusha Sunik (4 mistakes)			Go to profile	
Story	Level	Date	Correct Answer	Student Answer
Little Red Hen	2	Dec 12, 2018	they	thay
Little Red Hen	2	Dec 12, 2018	cow	kow
Little Red Hen	1	Dec 12, 2018	on	om
Little Red Hen	1	Dec 12, 2018	by	dy



Stories Read: A list of stories chosen when students start the activity. This section will list the frequency and number of students that the stories listed.

Words Clicked On: A list of words in the stories that the students asked for help with pronunciation.

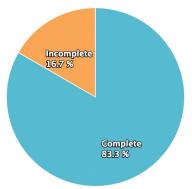
Activity Insights: Description of the skills targeted in an activity and suggestions for reinforcing those skills.

Stories Rea	d	
Stories Read	# Times	# Students
Henny Penny	4	2
Little Red Hen	2	1
l Can Move Like A	1	1

Activity Connections: A list of other ABRA activities connected to the current one that build or extend the skills targeted in the current activity.

Drop-down Filter for Overall or Level Information: A drop-down menu allows for the data to be displayed for the activity overall, or to filter by a specific level.

Complete/Incomplete Pie Chart: A quick indication of how many students have complete the activity at least once. If viewing the data for all levels, 'complete' would mean they have gone through each level at least once.



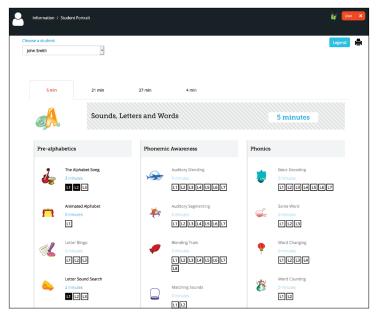
### Student Portrait

### CATEGORY OVERVIEW

This page provides a quick indication of:

- Which activities this student has attempted
- Which levels the student has completed in the activity at least once
- How much time they spent in each activity and in the category overall.

Click on an activity to see more details about the student's progress within that activity.



#### **ACTIVITY DETAILS**

The activity detail pages contain a lot of the same type of information that is in the class portrait. However, the emphasis is different, so the information might be arranged differently. The report includes:

- Summary
- Access Statistics
- Correct/Incorrect Statistics
- Error Report
- Stories Read
- Words Clicked On
- Activity Insights
- Activity Connections
- Drop-down Filter of Overall or Level Information.

As each activity is different, the information on this page will change to align with what is relevant for the chosen activity.

By default, many of these sections are hidden when the teacher first accesses the activity details page. Click on the triangle buttons ✓ near the headings to show or hide content.

Summary: Clicking on the activity name will provide a description of the activity, focusing on its objective. If the activity has multiple levels, then a short description of each level is provided.

Access Statistics: The total number of times spent in the activity, number of times the activity was started, and the average time spent in that activity is listed.

Correct/Incorrect Statistics: List the total number of times that the student was able to answer correctly on the first attempt, on the second attempt after guidance was provided by ABRA, and incorrect answers.

Not all of the activities provide a second attempt to answer the question, so occasionally this table will only list a correct or incorrect count.

Error Report: Provides details of the errors made by the student. These errors are listed in chronological order. The error tables will look different in each activity as the type of errors varies from activity to activity.

Stories Read: A list of stories chosen when the student started the activity. This section will also list the frequency that each story was chosen with the current activity.

Words Clicked On: A list of words in the stories that the student asked for help with pronunciation.

Activity Insights: Description of the skills targeted in an activity and suggestions for reinforcing those skills.

Activity Connections: A list of other ABRA activities connected to the current one that build or extend the skills targeted in the current activity.

Drop-down Filter for Overall or Level Information: A drop-down menu allows for the data to be displayed for the activity overall, or to filter by a specific level.

### **Teacher Resources**

The ABRA Resource Page offers teachers a multitude of paper-based and multimedia resources intended to help teachers implement ABRA effectively in their classroom.

### **ACCESSING THE SITE**

There are two ways to access the site:

1) From the LTK+ lobby page, click on R the apple icon

2) Go directly to the URL: https://grover.concordia.ca/resources/abra/teacher/en/

### CONTENT ON THE SITE

The ABRA Teacher Resources website has the followings sections:

- Homepage
- Activities
- Stories
- Using ABRA
- Videos
- Resources



Homepage: Provides an overview of the tool, including a brief description, where it is being used, and the philosophy behind the design.

Activities: Literacy skills are divided into four sections: Sounds, Letters, and Words (Alphabetics), Understanding the Story (Comprehension), Reading (Fluency), and Writing (Typing).

In total there are 33 activities in ABRA. For each of the activities, a brief demo is available as well as a description of the activity's objective, group facilitation tips, and an explanation of the content and levels of each activity. Teachers can also choose to review the activity insights, what stories are linked to this activity, and any resources, such as lesson plans, that are connected to this activity.

Stories: There are two ways the stories are



organized: by category (genres) or by themes. The categories are: Folk and Fairy Tales, Poetry, Fiction, and Non-Fiction. The themes are: Adventure, Animals, Family & Friends, Feelings & Values, Food, Games & Sports, Imagination, Nature, Numbers, Other Themes, Places, and School.

Each of the stories is accessible in PDF format on the site. To help teachers assess the appropriateness of the story for their classroom, a summary and difficulty level is provided. If the story was connected to ABRA activities, that is also indicated on the website. Any resources linked to the story, such as lesson plans or worksheets, are also listed.

Using ABRA: This section provides guidance for teachers that want to jump right into using ABRA. It includes quick links to resources, such as this teacher guide, explanation of ABRA features, and how to use ABRA with other LTK+ tools.

Videos: This section provides quick access to video support. Videos are grouped into playlists centered on a theme.

**Resources**: This section provides resources to support teachers' use of ABRA in their classrooms. These resources include a large number of PDF documents. Some example resources include lesson plans, worksheets, guides, and teacher aids.

As ABRA is used worldwide, there is also region-specific content available in this section.

PARENT MODULE



### **Parent Resources**

This module provides similar resources as the *Teacher Resources*, but it is targeted towards parents and guardians. Parents should be encouraged to access this resource to learn more about the importance of literacy and how to support use of ABRA at home.

Parent can access this resources by going directly to the URL: https://grover.concordia.ca/resources/abra/parent/en/



Note: The Parent Resources web pages are currently being revised.



# **Using ABRA with Other Tools**

### **ABRA-ePEARL** Link

Within ePEARL there is a built-in connection to ABRA, which allows students to record their readings and/or to create original content inspired by the ABRA stories.

### My Readings

Twenty digital stories are available in both ABRA and ePEARL. Each book may be viewed and read from within either program. When reading in ePEARL, students can record themselves reading. The recording allows a student, teacher, or parent to monitor and track reading development. Listening to one's own reading is proven to be an extremely effective tool for self-monitoring and consequently learning.



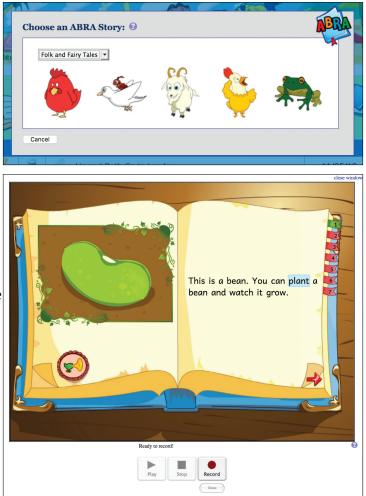
To record an ABRA book, students should go the My Readings section in ePEARL. Then, they should click

on the New ABRA Reading button, and they will be asked to choose an ABRA story.

### **DIGITAL STORIES**

Two of ABRA's main tracking features are accessible in ePEARL: the *Repeat* button that will read the page aloud to the student, and the ability to click on words in the story to get help pronouncing words. This scaffolding is important for the beginner reader. ABRA provides extra help so students can obtain the support they need to develop reading skills, when they work independently.

A recorder is provided for recording reading samples. This allows students, teachers and parents to track reading development over time.





Students can also practice their creative writing skills in the *My Creations* area. For example, they may link their writing to an illustration from a selected ABRA book. Teachers can encourage their students to write a new ending to a story or to summarize the events depicted in an illustration. Students can also upload images and pictures of drawings.



Students should go the *My Creations* section in ePEARL. Then, they should click on the *New ABRA Creation* button. They will be asked to choose an ABRA story. Following this, illustrations from the story will be presented.

### STUDENT ASSESSMENT

By implementing the ABRA-ePEARL link, teachers can track their students' literacy development. For example, teachers can use ePEARL for assessment purposes when doing the following ABRA activities:

- Accuracy.
- Comprehension Monitoring.
- Expression.
- Prediction.
- Sequencing.
- Speed.
- Spelling Sentences.
- Spelling Words.
- Vocabulary.



### References

Bailey, B., Arciuli, J., & Stancliffe, R. J. (2016). Effects of ABRACADABRA literacy instruction on children with Autism Spectrum Disorder. Journal of Educational Psychology. Advance online publication. [http://dx.doi.org/10.1037/edu0000138]

Bailey, B., Arciuli, J., & Stancliffe, R. J. (2017). Effects of ABRACADABRA instruction on spelling in children with Autism Spectrum Disorder. Scientific Studies of Reading. 21(2), 146-164. [https://doi.org/10.1080/10888438.2016.1276183]

McCarthy, T. (1996). Teaching Genre: exploring 9 types of literature to develop lifelong readers and writers. Missouri: Scholastic Professional Books.

McNally, S., Ruiz-Valenzuela, J., & Rolfe, H. (2016). ABRA: Online Reading Support. Evaluation Report and Executive Summary. Retrieved from Education Endowment Foundation website: https://educationendowmentfoundation.org.uk/public/files/Projects/ Evaluation\_Reports/EEF\_Project\_Report\_ABRA.pdf

Wood, E., Grant, A.K., Gottardo, A., Savage, R. & Evans, M.A. (2016) Software to promote young children's growth in literacy: A comparison of online and offline formats. Early Childhood Education Research Journal. http://dx.doi.org/10.1007/s10643-016-0779-9