

AAC Evaluation Genie is an informal diagnostic tool that is intended to assist speech-language pathologists and others with identifying skill areas that relate specifically to the language representation methods commonly found on augmentative communication systems. The purpose of AAC Evaluation Genie is not to identify a particular speech generating device (SGD), but rather build a framework for selecting an appropriate augmentative communication device for ongoing evaluation and / or device trial. There are 13 subtests that can be administered with screening options available for each subtest

### **Vision Skills**

1. Visual Identification
  - a. Evaluates the user's ability to visually track and identify an extra large to small single icon.
  
2. Visual Discrimination
  - a. Evaluates the user's ability to visually track and discriminate an extra large to small single icon.

The purpose of the visual skills subtests is to be able to implement device trials at the most accurate discrimination level, with goal to progress to identification level.

### **Vocabulary Skills**

1. Noun Vocabulary
  - a. This activity evaluates the user's ability to identify common noun vocabulary.
2. Function Vocabulary
  - a. This activity evaluates the user's ability to identify common noun vocabulary by stated function.
3. Verb Vocabulary
  - a. This activity evaluates the user's ability to identify common verb (action word) vocabulary.
4. Category Recognition
  - a. This activity evaluates the user's ability to identify common noun vocabulary by category group inclusion.
5. Word Association
  - a. This activity evaluates the user's ability to identify a noun by associated feature or function.
6. Category Inclusion
  - a. This activity evaluates the user's ability to identify common noun vocabulary by category inclusion.
7. Category Exclusion
  - a. This activity evaluates the user's ability to identify common noun vocabulary by category exclusion.

The purpose of the vocabulary skills subtests is to identify vocabulary strengths and weaknesses as well as to provide insight into vocabulary diversity, and provide general indicators of word

fluency. This information will start to provide the evaluator with the information needed in order to make judgments as to whether device trial implementation will require a customized display or if a commercial language system (i.e. Unity, Gateway, Word Power, Sono, Vocab PC, Touch Chat] can be used.

### **Core Vocabulary Knowledge**

1. Pixon Core Vocabulary
  - a. This activity evaluates the recognition and identification of common core vocabulary words not easily represented with pictures using single meaning Pixon® symbols.
2. Unity Icon Patterns
  - a. This activity evaluates the identification of vocabulary organized by Minspeak Unity® semantic / linguistic patterns.

The Core Vocabulary items have been carefully selected to represent commonly used words used both by children learning to use language as well as adult language models. The vocabulary items selected are based on:

- First 8,15, 30 Words (Van Tatenhove, 2005] which applied Top Words Used by Toddlers (Banajee, Dicarlo, & Stricklin, 2003] to a clinical model.
- Vocabulary List: Young Adult Conversation Augmented (<http://aac.unl.edu/VLN3.html>]

These subtests should not be considered strict assessments of Pixon® and Unity® Minspeak symbols. AAC Evaluation Genie uses these symbol systems to evaluate how well a person with complex communication needs, based on their life experiences with words, is able to apply meaning to core words not easily represented using pictures.

### **Picture Description**

This activity evaluates the user's ability to describe basic pictures using a simulated AAC display. The Picture Description subtest is an informal measure intended as a way to obtain a brief language sample using a highly familiar and repetitive picture description task. This allows the evaluator to make skilled observations regarding the effectiveness of cueing and response to cue fading. It also provides a foundation with which to apply principles of normal language development to SGD language feature components. The evaluator is able to compare the obtained Mean Length of Utterance (MLU] and apply what is known about typical language milestones. This way, the SGD necessary feature set will include appropriate semantic, syntactic and morphological features. The recommended reference is Normal Language Development, Generative Language & AAC by Gail M. Van Tatenhove, PA, MS, CCC- SLP available at <http://www.vantatenhove.com/papers.shtml>

### **Word Prediction**

- This activity evaluates the user's ability to read text and select a target word from a list of four choices.

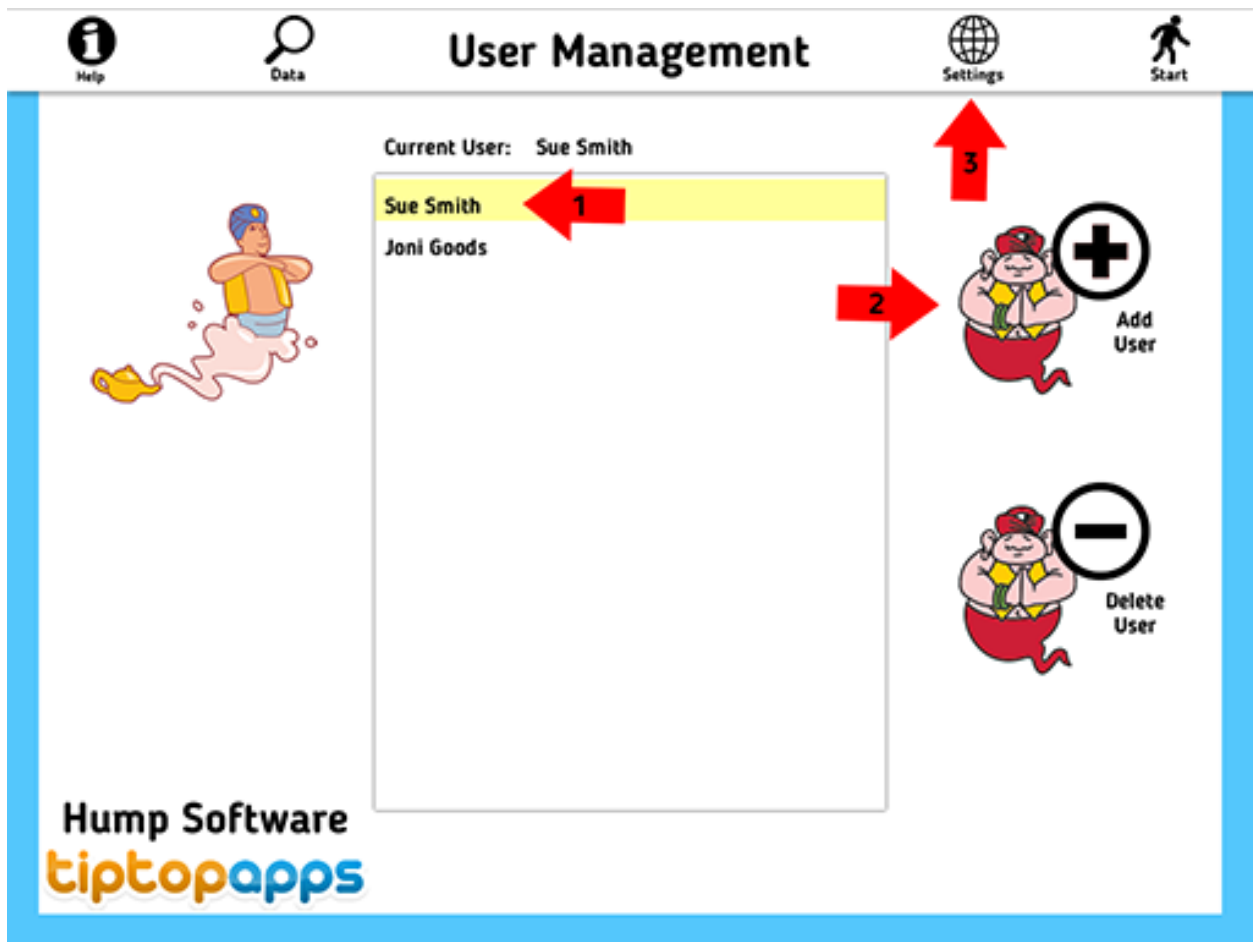
The Word Prediction is not intended to replace a comprehensive literacy assessment. It is useful to determine whether word prediction can be considered as a useful SGD feature for additional evaluation and device trial.

### Getting Started with AAC Evaluation Genie



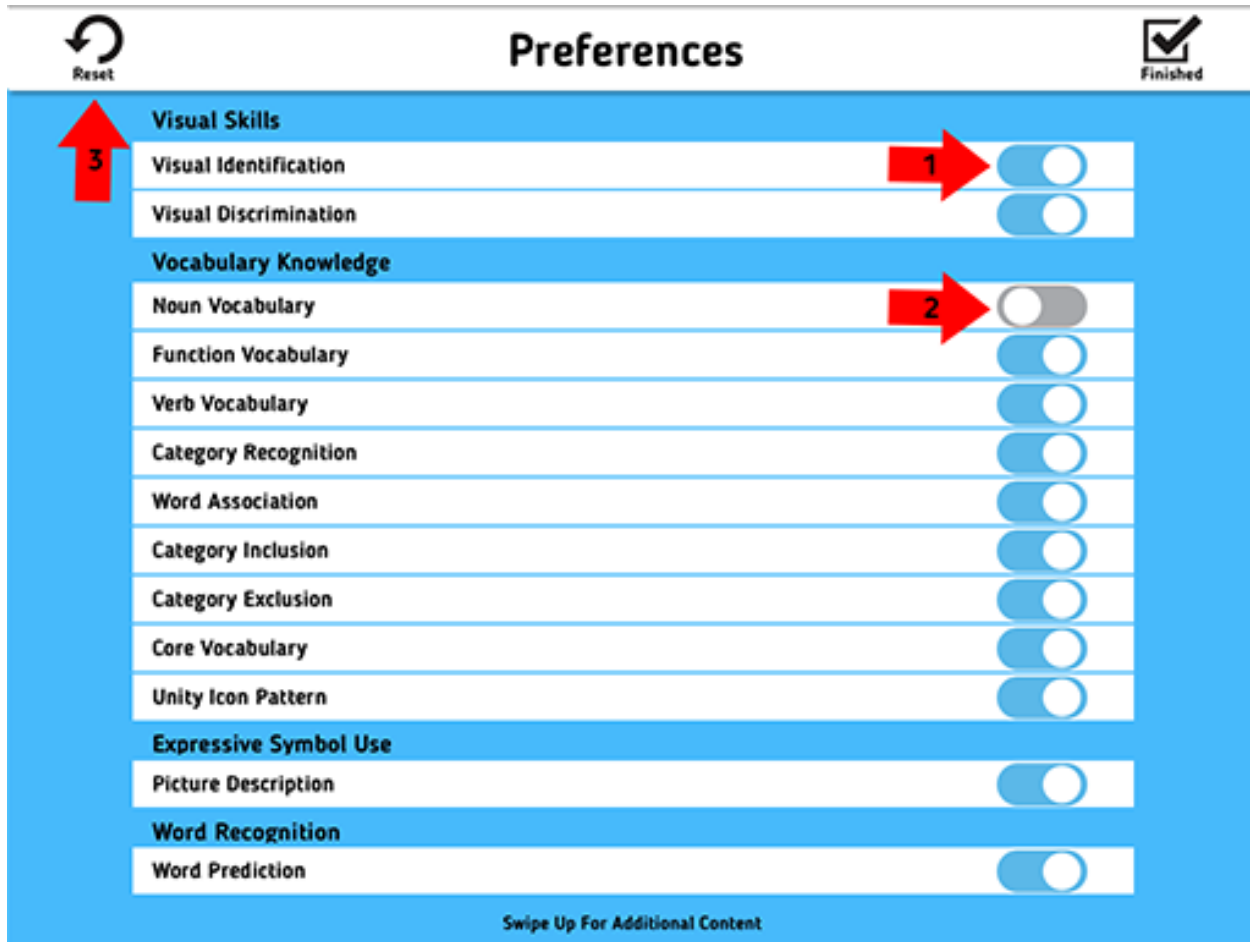
Tap the AAC Evaluation Genie icon on your iPad to get started!

The first step is to create or select a user. If a user exists, tap the name in the user List Box (1). To create a new user, tap the Add User icon (2). Once the user is selected, tap the Settings button to configure the administration options (3).



Settings

The first screen in the Settings section allows you to choose which diagnostic activity to administer. Toggle individual subtests selections using the switch buttons (1). The button will turn grey and the slider button will be positioned on the left to indicate that a selection has been disabled (2). The Reset button will provide the option to enable or disable all subtests (3).

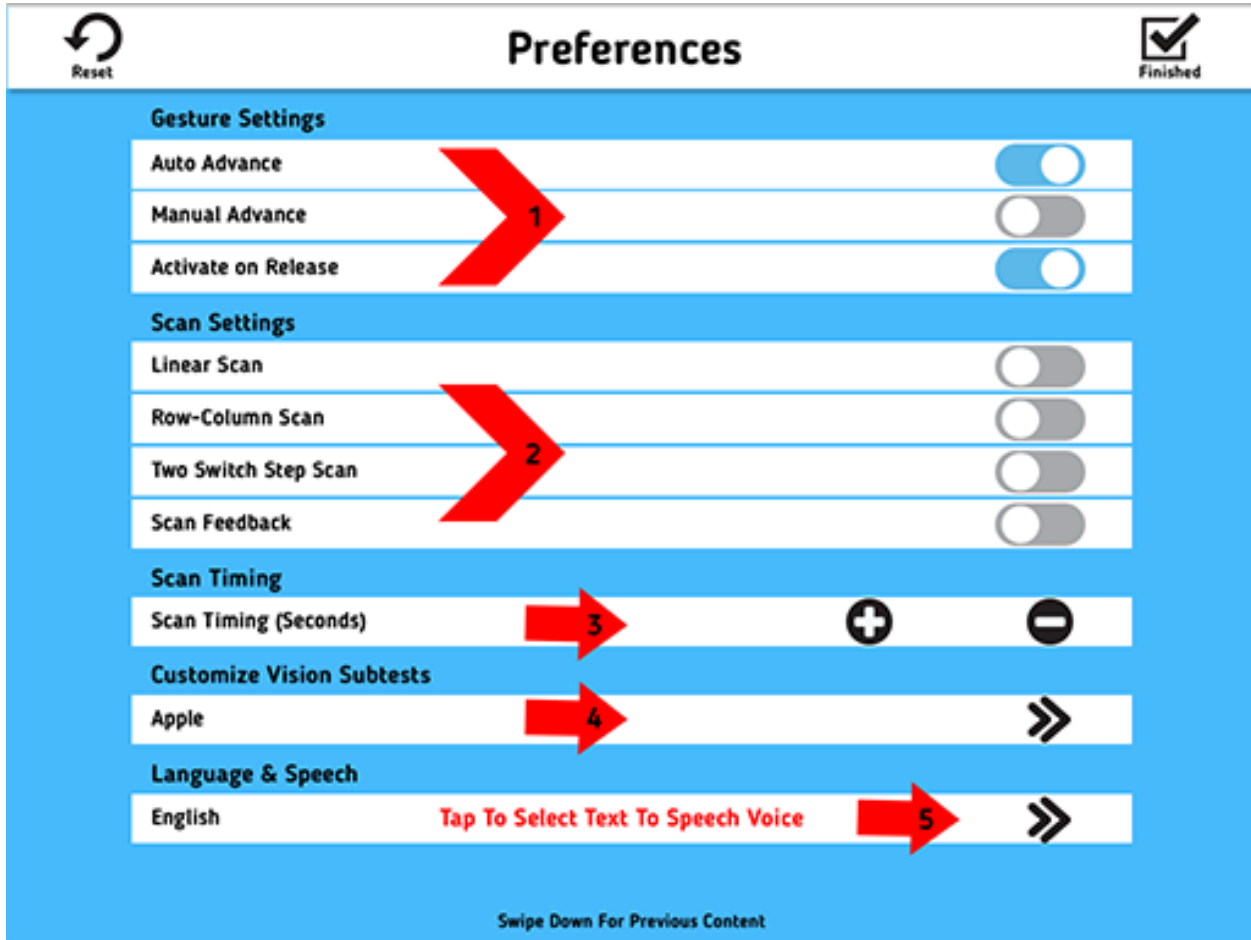


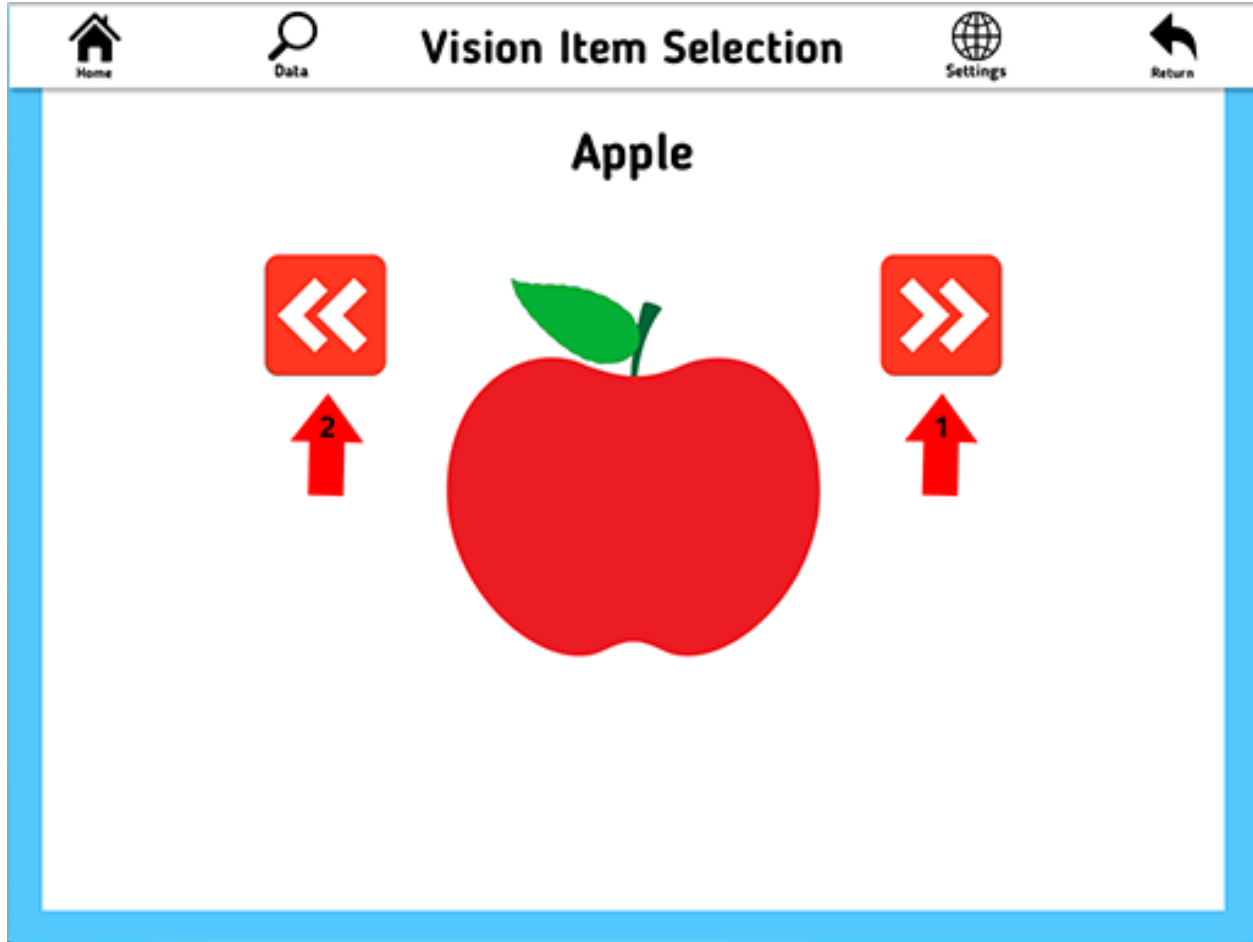
Access the second screen in the Settings section by swiping up. This section allows you to configure access and use options.

The gesture setting options (1) will determine if AAC Evaluation Genie automatically progresses following a response or manually advances by the examiner. The Active on Release setting configures AAC Evaluation Genie to accept a response only when the screen tap is released.

The Scan Settings (2) are used when single / dual switch scanning is required. Select the Scan Feedback to have an auditory cue with each scan progression. Select the Scan Timing (3) to the desired rate of scan. The lower the number, the faster scanning will progress from one item to the next.

Tap the arrow next to the Customize Vision Subtest (4) in order to select which of the 30 available picture stimulus items will be used with the Visual Identification and Visual discrimination subtests. Tap the Language and Speech arrow (5) to select English or Spanish testing language and voice.



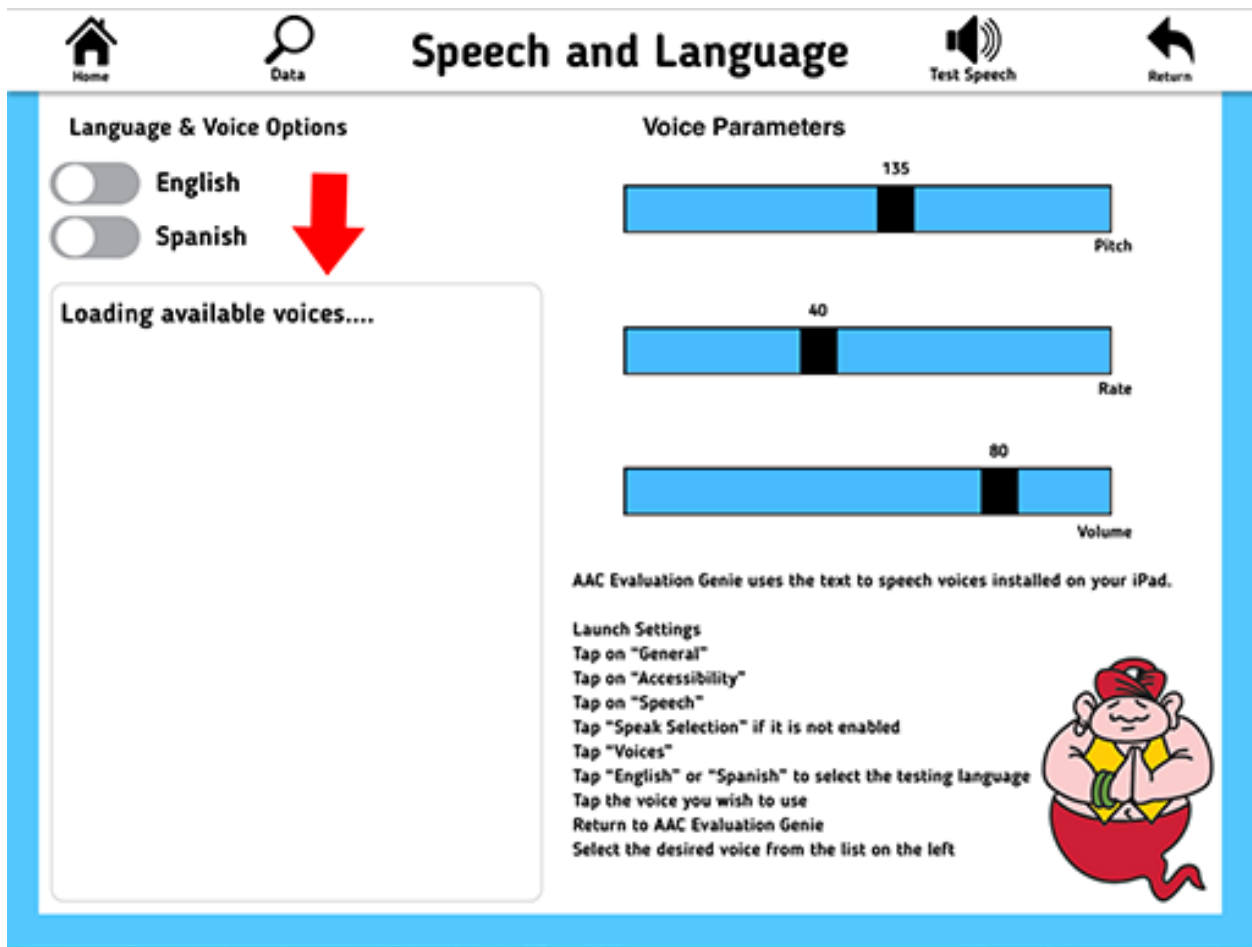


Tap the right and left arrows to move between the vision items for selection. The following options are available for selection. Photographs, color line drawings and two high contrast shapes are included.


Apple  
Baby  
Balloon  
Car  
Cat  
Flower  
Lion  
Rabbit  
Star  
Strawberry

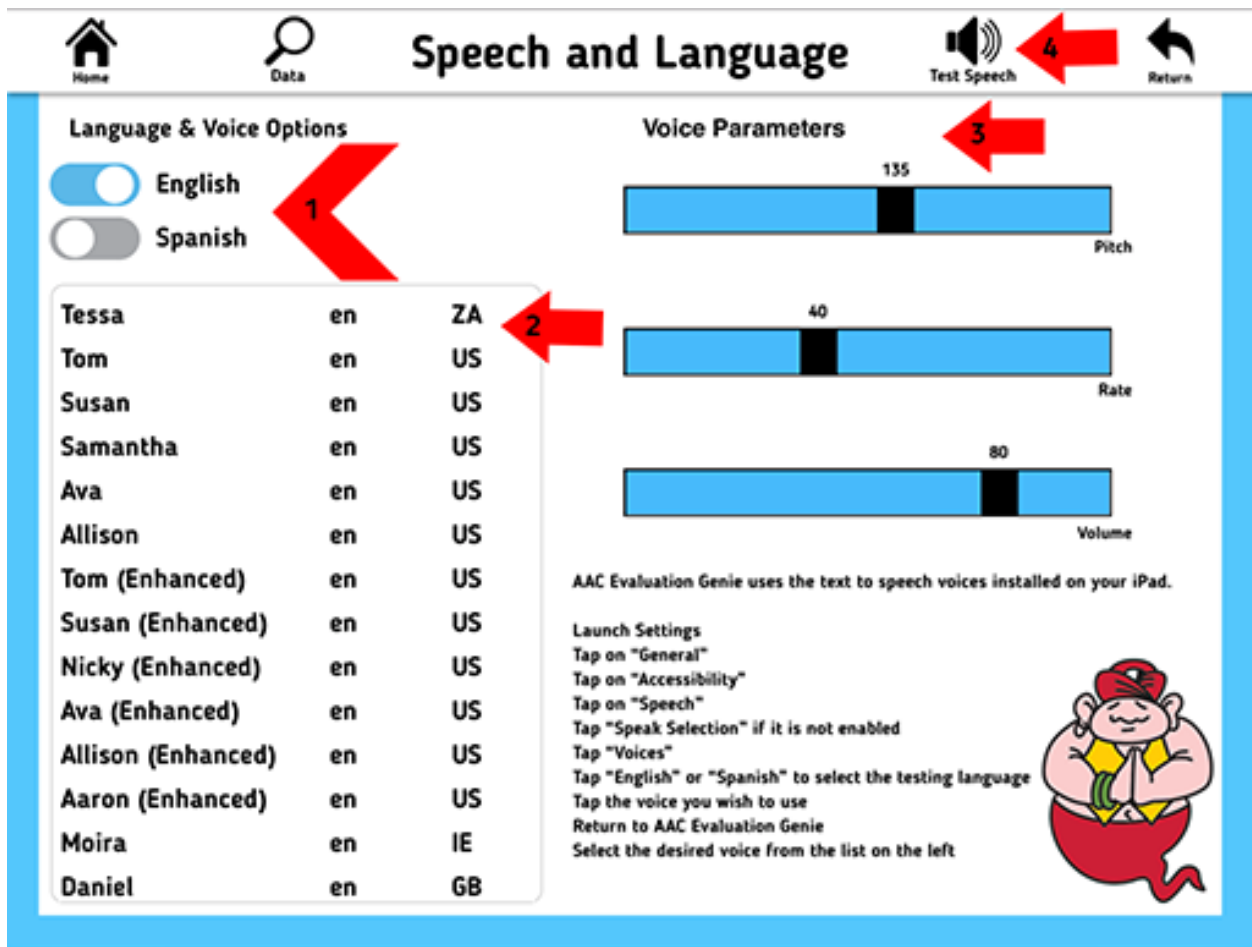
Santa  
Penguin  
Orange  
Mouse  
Horse  
Duck  
Dog  
Dinosaur  
Clown  
Candy

Bird  
Barn  
Bananas  
Bag  
Triangle  
Butterfly  
Comb  
Cow  
House  
Truck




When AAC Evaluation Genie is first opened, the text box will alert you that the voices installed on the iPad are loading. This may take one or two minutes. High quality voices can be downloaded as follows:

- Launch Settings
- Tap on "General"
- Tap on "Accessibility"
- Tap on "Speech"
- Tap "Speak Selection" if it is not enabled
- Tap "Voices"
- Tap the language you wish to download voices
- Tap the download icon to download and install the voice on your iPad 



Once the available voices have been listed, select either English or Spanish (1) for the desired testing language. This will also filter the voice list to the respective available voices. Tap the desired voice (2) to select for testing. The Voice Parameters (3) allow changes to pitch, rate and volume. Tap the Test Speech icon (4) to listen to a sample of the configured speech. Tap return to exit.

At this point, you will be ready to start administrating AAC Evaluation Genie. The icons are labeled for easy reference. The data summary can be saved as a pdf file, printed to a compatible wireless printer, or transmitted via email. 

It is always recommended that you maintain a non-confidential copy of the data summary outside of the AAC Evaluation Genie app.