iPad communication assessment tool:

Assessing the iPad as an Appropriate Tool for a Students Communication

This tool will assist teachers in assessing students' communication, if the iPad is an appropriate tool to support their communication and what apps will be appropriate to support their communication. It provides an action plan template to assist teachers in planning teaching and assessment.
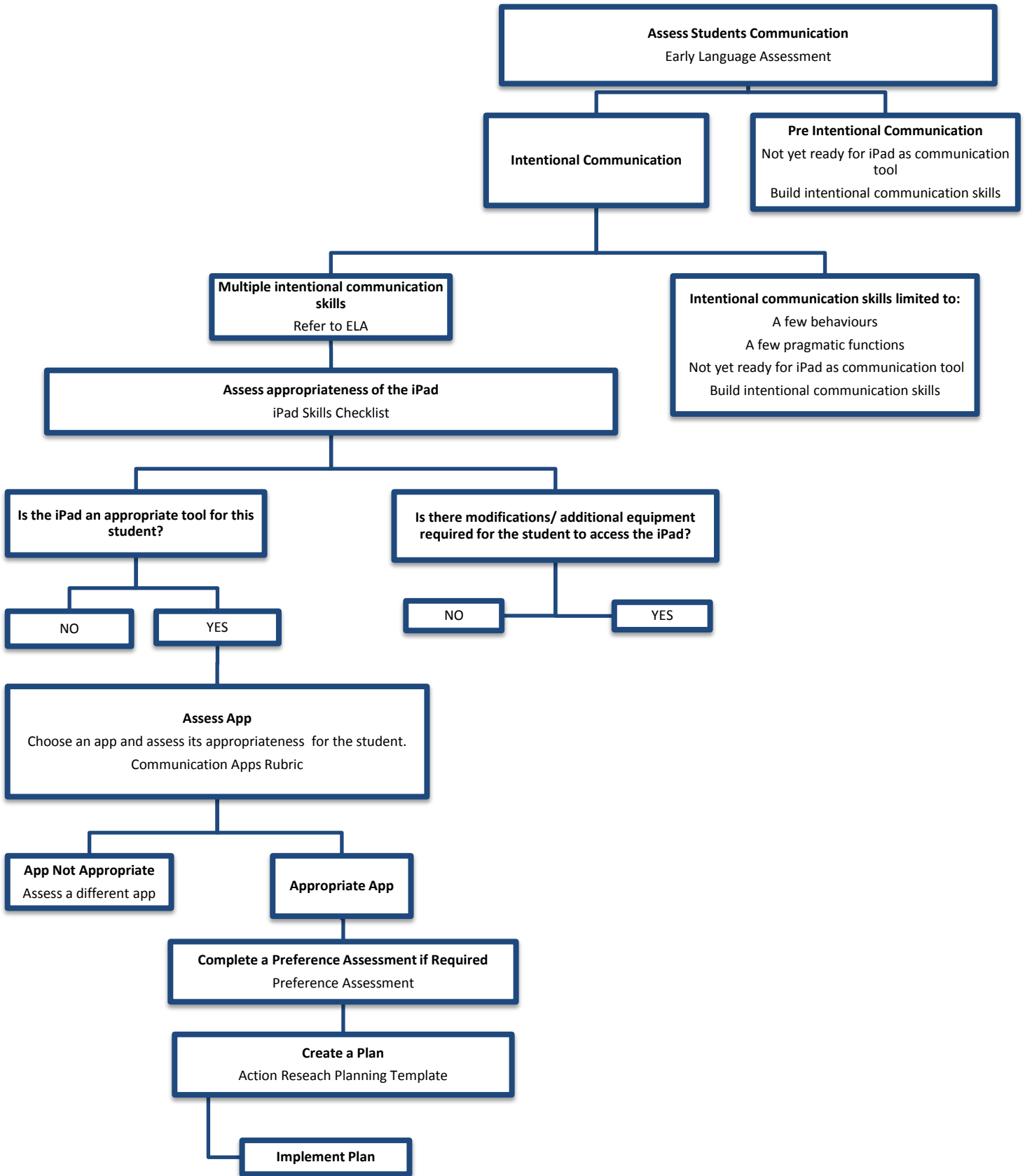
Contents

Flow Chart of Assessment

Assess Students Communication

Early Language Assessment

Intentional Communication

Pre Intentional Communication

Not yet ready for iPad as communication tool

Build intentional communication skills

Multiple intentional communication skills

Refer to ELA

Intentional communication skills limited to:

A few behaviours

A few pragmatic functions

Not yet ready for iPad as communication tool

Build intentional communication skills

Assess appropriateness of the iPad

iPad Skills Checklist

Is the iPad an appropriate tool for this student?

Is there modifications/ additional equipment required for the student to access the iPad?

NO

YES

NO

YES

Assess App

Choose an app and assess its appropriateness for the student.

Communication Apps Rubric

App Not Appropriate

Assess a different app

Appropriate App

Complete a Preference Assessment if Required

Preference Assessment

Create a Plan

Action Reseach Planning Template

Implement Plan

Early Language Assessment Tool

SPEECH PATHOLOGISTS
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Prepared by Belinda Hill Speech Language Pathologist September, 2012

Name: _____ DOB:_____

Teacher: _____Class/Year: _____

Pre-test Date:_____Age: _____

Post -test Date:_____ Age: _____

Key

Always	Sometimes	Rarely	Never	Not Observed	Not Applicable	Responds via AAC	Written Response
✓	∞	-	✗	NO	NA	AAC	W

Early Communication/Cognition

Skill	Pre	Post	Example
Means-End Is aware that an action leads to a result			
Causality Understands the relationship between cause and effect			
Anticipation Will wait for result/reaction			
Object Permanence Aware that an object exists once it is removed			
Imitation Able to copy actions or facial expressions			
Representation Aware that pictures or objects can represent other objects or situation			
Play Explores toys and understands representative play. Play can be symbolic and pretend.			
Memory Recall items or people seen before.			
Problem Solving Using a variety of schemas to work out problems e.g. with toy (pushing to operate)			

Receptive Language

Skill	Pre	Post	Example
Turns toward voice			
Maintains attention to face			
Looks for sound source			
Maintains attention to sound source			
Responds to greeting or farewell			
Looks for familiar object when named			
Understands 'no'			
Responds to own name			
Follows direction in context, with routine items			
Turns towards familiar items when named and in sight			
Follows commands with actions ('wave')			
Supplies item on request (common objects)			
Attends to task for 2 minutes duration			
Identifies major body parts e.g. eyes, nose, arm etc			
Understands common verbs e.g. 'give' 'jump' 'smile'			
Identifies animals			
Points to pictures in a book on request			

Skill	Pre	Post	Example
Understands prepositions e.g. 'in, on, under'			
Understands items by function e.g. Which one is for drinking?			
Understands items by use e.g. Which one do you ride on?			
Follows 1 step commands			
Follows 2 step simple directions e.g. 'Put the block on the book and come here/			
Identifies less common body parts on self e.g. elbow			
Understands complete sentences e.g. 'The boy is running'			
Understands complex sentences e.g. 'When it is lunch we will go outside'			

Expressive Language

Skill	Pre	Post	Example
Vocalises on own			
Responds to adult reach by lifting arms			
Waves to greet and farewell			
Makes noise to gain attention			
Points to direct others to items			
Pull or pushes to request/reject			

Attempts imitation of adult sounds			
Makes vowels sounds e.g.'ah'			
Makes consonant sounds e.g. 'p' 'b' 'm'			
Babbles in repeated strings e.g. bababa			
Babbles in alternating strings e.g. mabamaba			
Copies 1-2 adult actions/gestures			
Imitates adult sounds with close approximation			
Shakes head for 'no' or rejection			
Attempts some words			
Uses jargon (made up words with intonation but not true words) purposefully			
Offers a toy to others			
Uses stereotypical phrases such as 'oo-ah'			
Copies multiple motor actions			
Vocalises along with adult			
Uses multiple gestures/actions to signify specific meaning			
Says 'mama' or 'dadda'			
Uses first 5 real words e.g. mum, dad			

Gestures related to requests/needs			
Imitates specific sounds			
Uses 'no'			
Names 2 common objects			
Pairs pointing with jargon/vocalisation/word			
Uses 'p' 'b' 'm' 'h' in word approximations			
Uses 15 words			
Copies animal sounds and copies adult words			
Joins 2 simple words together e.g. more car			
Names self			
Uses words spontaneously to request or greet			
Vocabulary of 30 words			
Attempts to copy longer phrases			
Uses early pronouns e.g. me, you			
Uses sounds 'h' 'w' 't' 'd' in words			
Uses 2-4 word phrases**			
Attempts to talk about experiences removed from environment			
Names a colour			
Names a size			

	Pre	Post	Example
Has 200-300 word vocabulary			
Answers simple questions			
Uses simple grammatical endings e.g. 'ing'			
Uses communication to have a short conversation**			
Asks simple questions e.g. Who? What? Where? **			
Uses describing words with nouns e.g. big ball			
Sings along with whole songs			
Uses longer complete sentences**			
Joins sentences together to make a retell of an event**			

** refer to sentence structure document

Communicative Function

Skill	Pre	Post	Example
Responds to others			
Protests in response to actions or others			
Labels items in environment			
Request object or person or activity			
Gives a command			
Clarifies if others interpret communication incorrectly			
Greets			
Denies or disagrees			
Gains attention			

Describes attributes of objects			
Asks Questions			
Seeks assistance			
Requests more of action			
Makes choices			
Informs others of needs and wants			
Comments			
Express Feelings			
Answers yes/no			
Communicates in response to a direct prompt (If you want a drink tell me/point to drink; physical prompts to use AAC or signs)			
Initiates communication in presence of natural cues (eg presence of something to talk about, presence of a listener)			
Initiates communication when relevant events are highlighted (eg partner draws attention to an object – taps on it, or points)			
Initiates communication in response to a general cue or prompt for communication (eg asked "What do you want?"; given communication device)			

Picture Skill Sequence

Skill	Pre	Post	Example
Student attempts to grasp objects in realistic photos			
Student shows an interest in pictures (touches, points to looks at pictures) rather than treating as an object (chewing, folding, flapping)			
Student can learn the name of an object and transfer to a picture of the object and vice versa			
Student can match an object to a picture and vice versa			
Student can select a picture from a number of pictures when given the spoken name, or can name a picture			
Student can imitate actions shown in a picture or video			
Student can make choices/request using pictures (Can select picture and then the object that the picture represents)			
Student can use a range of different pictures for the same object, or use the same picture to refer to a range of objects. (for example, could use a range of drawings and photos of different breeds of dogs to refer to any dog; could use one picture of a dog to refer to many different breeds of dog).			

Sentence Structure Development Client Record

KEY:
S= Subject, e.g. (mummy)
V= Verb, e.g. (run)
O= Object, e.g. (ball)
C= Complement, e.g. (happy)
A= Adverbial, e.g. (there) of place or time, e.g. (now)
Q= Questions, e.g. (where?)

APL= Average phrase length
SS= Sentence Structure
G= Grammar

NAME	
D.O.B.	
DATE	
AGE	
RECORDER	

Sentence Level

Developmental Age (months)

12

Q ☐
Naming ☐
Commands ☐
More than 60 single words ☐

1

2 Words

24

SV ☐ e.g._____
SO ☐ e.g._____
SC ☐ e.g._____
Q ☐ e.g._____
VO ☐ e.g._____
Commands ☐ e.g._____
Negatives ☐ e.g._____

2

3 Words

30

SVO ☐ e.g._____
SVC ☐ e.g._____
SVA ☐ e.g._____
Q ☐ e.g._____
VOO ☐ e.g._____
Commands ☐ e.g._____
Negatives ☐ e.g._____

3

4 Words

36

SVOA ☐ e.g._____
SVCA ☐ e.g._____
Q ☐ e.g._____
SVOdOi ☐ e.g._____
Commands ☐ e.g._____
Negatives ☐ e.g._____
Joining Phrase ☐ e.g._____
Comparatives ☐ e.g._____

4

5 Words

48

Complex noun phrases ☐ e.g._____
Complex verb phrases ☐ e.g._____
Passive Phrases ☐ e.g._____
'How' and 'What is' questions ☐ e.g._____

5

6 + Words

0

Complex conjunctions ☐ e.g._____
Stereotypical phrases ☐ e.g._____
Using word order to add meaning ☐ e.g._____
Use of 'it' at the start of a sentence ☐ e.g._____
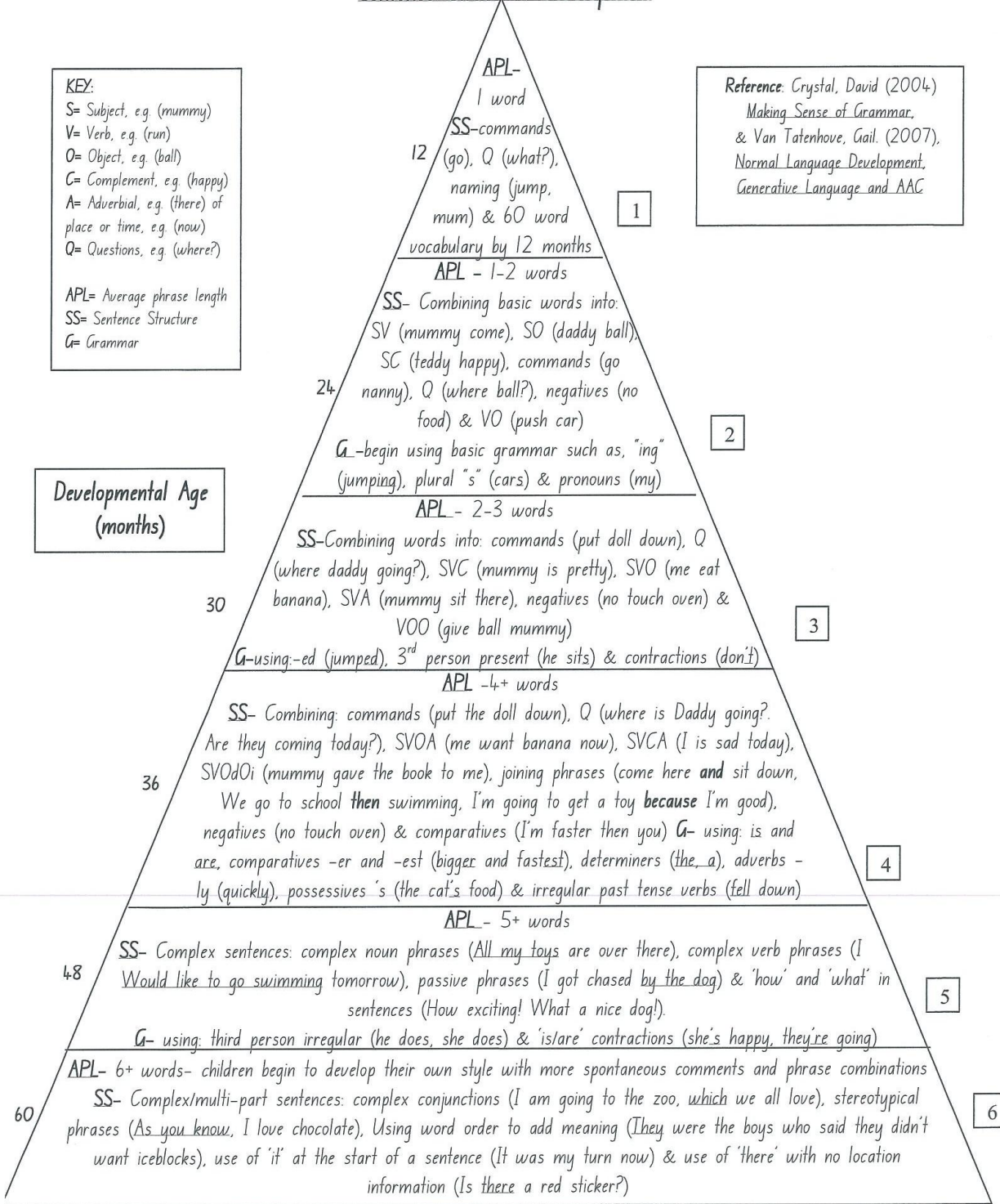Use of 'there' with no location information ☐ e.g._____

6

Sentence Structure Development

KEY:
S= Subject, e.g. (mummy)
V= Verb, e.g. (run)
O= Object, e.g. (ball)
C= Complement, e.g. (happy)
A= Adverbial, e.g. (there) of place or time, e.g. (now)
Q= Questions, e.g. (where?)

APL= Average phrase length
SS= Sentence Structure
G= Grammar

Developmental Age (months)

12

APL- 1 word
SS-commands (go), Q (what?), naming (jump, mum) & 60 word vocabulary by 12 months
[1]

24

APL – 1-2 words
SS- Combining basic words into: SV (mummy come), SO (daddy ball), SC (teddy happy), commands (go nanny), Q (where ball?), negatives (no food) & VO (push car)
G –begin using basic grammar such as, "ing" (jumping), plural "s" (cars) & pronouns (my)
[2]

30

APL - 2-3 words
SS-Combining words into: commands (put doll down), Q (where daddy going?), SVC (mummy is pretty), SVO (me eat banana), SVA (mummy sit there), negatives (no touch oven) & VOO (give ball mummy)
G–using:-ed (jumped), 3rd person present (he sits) & contractions (don't)
[3]

36

APL –4+ words
SS- Combining: commands (put the doll down), Q (where is Daddy going?. Are they coming today?), SVOA (me want banana now), SVCA (I is sad today), SVOdOi (mummy gave the book to me), joining phrases (come here **and** sit down, We go to school **then** swimming, I'm going to get a toy **because** I'm good), negatives (no touch oven) & comparatives (I'm faster then you) G– using: is and are, comparatives -er and -est (bigger and fastest), determiners (the, a), adverbs -ly (quickly), possessives 's (the cat's food) & irregular past tense verbs (fell down)
[4]

48

APL - 5+ words
SS- Complex sentences: complex noun phrases (All my toys are over there), complex verb phrases (I Would like to go swimming tomorrow), passive phrases (I got chased by the dog) & 'how' and 'what' in sentences (How exciting! What a nice dog!).
G- using: third person irregular (he does, she does) & 'is/are' contractions (she's happy, they're going)
[5]

60

APL- 6+ words- children begin to develop their own style with more spontaneous comments and phrase combinations
SS- Complex/multi-part sentences: complex conjunctions (I am going to the zoo, which we all love), stereotypical phrases (As you know, I love chocolate), Using word order to add meaning (They were the boys who said they didn't want iceblocks), use of 'it' at the start of a sentence (It was my turn now) & use of 'there' with no location information (Is there a red sticker?)
[6]

iPad Skills Checklist

Name: _____ **DOB:**_____

Teacher: _____ **Class/Year:** _____

Pre-test Date:_____ **Age:** _____

Post -test Date:_____ **Age:** _____

Key

Yes	Sometimes	No	Not Observed
✓	∞	✗	NO

Physical Abilities

Does the student have restrictions in the areas of:

Vision abilities	
Auditory abilities	
Arm movement	
Hand movement	
Finger movement	
Other physical restrictions:	

iPad Skills

Is the student able to:

Visually see the screen	
Visually scan objects on the iPad (eg. For switch use)	
Use a switch to access the iPad	
Touch the screen with a whole hand	
Touch the screen with a single finger or thumb	
Accurately point to a specific object with their index finger	
Hold the iPad securely in their grasp	
Safely and securely leave the iPad in place (eg. On table or tray)	
Swipe/Scroll the screen	
Pinch the screen (enlarge/decrease image)	
Double tap icons	
Drag and drop icons	
Move between pages	
Navigate between folders within an app	
Open an app	
Locate a specific app	
Turn the iPad on and off	
Use the iPad with a communication partner	
Use the iPad independently	

Behaviour Support

Does the student present any other behavioural concerns that would limit their access to the iPad:

Motivation

Is the student:

Interested in the iPad	
Motivated by the iPad	
Easily distracted by other apps on the iPad	
Able to stay engaged and on task for extended periods of time	

Communication Skills

What visuals are currently used:

Real objects	
Photos	
Symbols/Drawings	
Words	

What size visuals is the student currently using:

2.5cm x 2.5cm or smaller	
3cm x 3cm to 5cm x 5cm	
6cm x 6cm to 10cm x 10cm	
11cm x 11cm to 15cm x 15cm	
16cm x 16cm or larger	

What number of visual representations is the student able to choose between:

Single	
Multiple (Please specify number)	

Is the student able to generalise visual representations (eg. Is able to recognise symbols but only when they are from the Boardmaker library):

Yes	
No	

What communication aids is the student currently using:

What communication iPad apps is the student currently using:

What communication iPad apps has the student previously used:

Links to Other Settings

Is the student currently using a communication aid in other settings:

Nil at present		
Indicate below what communication aid in each relevant setting?		
Home		
Respite		
Community Access		
Other		

Does the student have a personal iPad:

No	
Yes	

Is the student currently using a communication iPad app at home:

No		
Yes		Which apps?

Communication Goals

What communication skills do you want the student to develop:

Choices/ Requests	
Asking Questions	
Social Interactions	
Commenting & Describing	
Providing information	
Turn taking	
Story telling	
Building vocabulary	
Building sentences	
Other (Please specify)	

What is the future goal for using a communication app:

COMMUNICATION APPS RUBRIC

App Name: _____

Feature	Does App have this feature?	Does the learner or partner need this feature?	App matches need?
Are there pre-stored images? How many?			
Nature of graphics? Photo, drawing, PCS			
Automatic text label with graphics?			
Can you change text labels or enter your own labels?			
Do you need to enter all/most content (graphics, text, voice)? (If so, you can skip the next four boxes)			
Is required vocabulary included? Nouns (Names of people, places and things) Pronouns (e.g. I, he she, we, they, mine, hers etc.) Verbs (Action words) Conjunctions (words for joining – e.g. or, and, but Modifiers (Adverbs and adjectives that add meaning to nouns and verbs – red, colours) OTHER			
Is variation in word forms included? Plurals (-s, ies) Verb tenses (-ing, -ed) Comparatives (-er, -est) OTHER			

Communication Apps Rubric

Prepared by Jennifer Stephenson PhD, Associate Professor. Macquarie University Special Education Centre. Institute of Early Childhood, September, 2012

The aim of this rubric is to help teachers summarise the features of an App, summarise the expressive communication needs of the student and allow an evaluation of the match between what the app does and what the student needs.

You may need to write a specific short description in the second column for some features.

COMMUNICATION APPS RUBRIC

App Name: _____

Feature	Does App have this feature?	Does the learner or partner need this feature?	App matches need?
Are there pre-stored images? How many?			
Nature of graphics? Photo, drawing, PCS			
Automatic text label with graphics?			
Can you change text labels or enter your own labels?			
Do you need to enter all/most content (graphics, text, voice)? (If so, you can skip the next four boxes)			
Is required vocabulary included? Nouns (Names of people, places and things) Pronouns (e.g. I, he she, we, they, mine, hers etc) Verbs (Action words) Conjunctions (words for joining – e.g. or, and, but Modifiers (Adverbs and adjectives that add meaning to nouns and verbs – red, colours) OTHER			
Is variation in word forms included? Plurals (-s, ies) Verb tenses (-ing, -ed) Comparatives (-er, -est) OTHER			

Is vocabulary available for ALL communicative functions? Request/preference Ask questions Social/politeness Protest/reject Comment/provide information Repair communication breakdowns/misunderstandings Initiate/terminate Turn take Story telling OTHER			
Is vocabulary included for multiple contexts? Familiar routines and activities for home and school (e.g. Meals, morning circle, art/craft) Self care Community activities Activities specific to student OTHER			
Can you import own images? What kinds of images?			
Can you add your own text to imported images?			
Does the App provide voice output?			
Voice output choices? How many? Male/female Boy/Girl Australian accent Volume Speed			
Are the included voices easily understood by partners?			
Can you record own voice output?			
Does the App speak new text that you enter?			
Can you change the pronunciation of included text?			
Speaks one word or sentence per graphic?			

Static or dynamic display?			
Can the display be locked to one page?			
Does it allow multi-symbol combinations? Allows syntax?			
Is there a message window for multi-symbol messages?			
What are the access options? Touch screen only? Switch access? Scanner access?			
What scanning options are possible? Graphic by graphic Row and/or column Scans all buttons as well as symbol grid? Control speed of scanning?			
What is the maximum and minimum number of grids/pages?			
Is there a built-in organization system for pages?			
How are pages organized? Grammatical categories Activities Contexts Category groups (e.g. food)			
Can you create your own organization system?			
Are the displays in a grid or scene display?			
Range of sizes of graphics for grid display?			
What is the maximum and minimum numbers of graphics you can have on one grid?			
For larger grids, are all graphics visible on the screen at one time or is swiping needed?			

Is there any visual indication of which graphic has been touched? E.g. graphic gets bigger, moves to message window			
Can you have different size graphics in the one grid?			
Size of button area for various grids and scene displays?			
Can you change organisation within grids?			
How do you move between pages? Swipe Touch icon Go back to a menu/main page Slide show mode OTHER			
Is there an entry page(s) to assist in locating the relevant page?			
Are there sets of linked pages?			
Can you change background colour of graphics to assist organization?			
What motor skills are required Touch Swipe Pinch (enlarge/decrease) Double tap Drag and drop			
What other elements can you change? Font for text Colour Borders			
Can the app be set up for multiple users on the same device?			
How do you switch the App between users?			
Is it the same as/compatible with what the student is already using (home and school)?			

Can vocabulary be shared across devices at home and school?			
What supports are available for the App? Website Videos Tutorials OTHER			
What is the cost of the App?			
Could it be used to replace existing options for: Switch with a single message (BigMac) Switch with a set sequence of messages (Step-by-step communicator) Chat book Home/school diary			

Preference Assessment

This preference assessment refers to an App that is available at Kurrambee School. When you open the app on an iPad you can select instruction for how to use the app. A preference assessment guides a teacher as to what items, activities, foods, etc are the most motivating or favourite for our students. This preference assessment is able to perform 3 types of assessment –

1. Multiple Stimulus (MS). Items are presented in an array , and the item that is chosen is replaced every trial, so there are always the same number of choices. This type of assessment provides info on the single most preferred stimulus.
2. Multiple Stimulus Without Replacement (MSWO). Items are presented in an array, and each trial the item picked is not replaced, so there are less items in each presentation. This type of assessment provides more information about preferences among the array.
3. Paired or Forced Choice. Items are presented two at a time in front of the person. Trials continue until each item has been paired with every other item once.

Action Research Planning Template

Name: _____

DOB:_____

Teacher: _____

Class/Year: _____

How does this student communicate, and what is their current level of engagement with the iPad? (A statement that describes student's current communication levels, strategies and methods)

Communication app(s) selected for student use:

Specific communication goal: (what do we want this student to be able to do, using iPad?)

Description of student's current (baseline) performance level on this goal:

Description of data taken on baseline performance: Data type: e.g video

Date(s) of data taken:

Specific skills to be taught to achieve this goal:
(include strategies to teach these skills, teaching scripts, required materials etc)

Description of progress / setbacks on goal:

Date:

Date:

Date:

Date:

Date:

Opportunities for monitoring and evaluation of project:

Date: evaluation undertaken   data type:

Date: evaluation undertaken: data type:

Date: evaluation undertaken: data type:

Date: evaluation undertaken: data type:

Summary of project as at date:

Summative evaluation of project:
Date:

References

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Acknowledgements

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