



WELCOME!  
The iPod Touch, iPhone &/or  
iPad to Support or Enhance  
Fine Motor Skills

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Assistive Technology Specialist

Robin Philps, OT, Reg.(NS)  
Janelle Knickle, OT, Reg.(NS)  
Barbara Cochrane, B.Ed., M.Ed.



Presenter

Barbara Welsford, M.Ed., ATP,  
ATS, LDATS, ADE

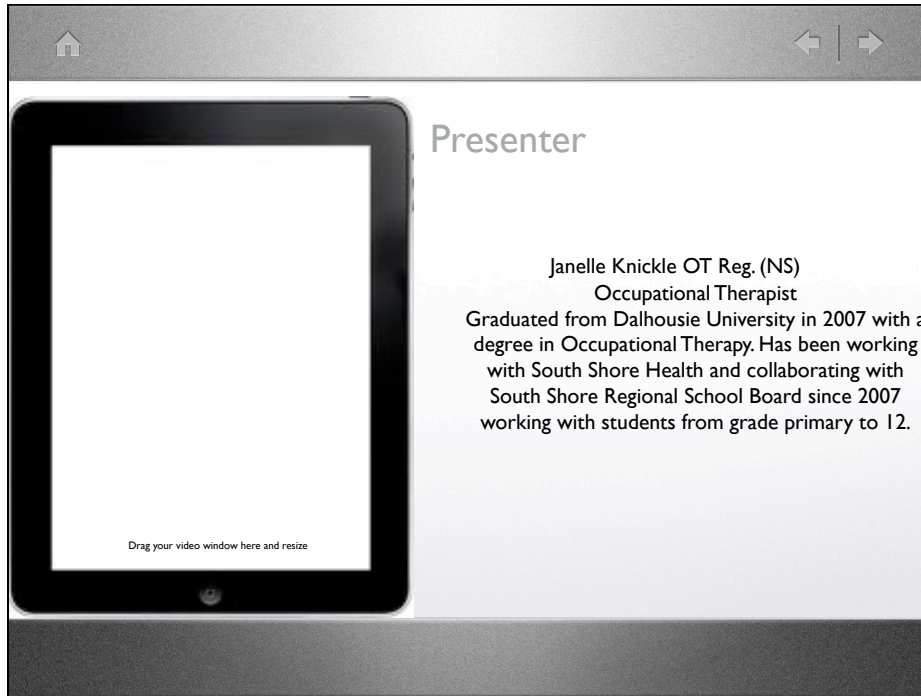
Assistive Technology Specialist

Barbara Welsford, M.Ed., ATP, ATS, LDATS, ADE  
Apple Distinguished Educator 2011  
Proloquo2go Certified Trainer  
Assistive Technology Specialist

In the field of AT for over 25 years  
Assistive Technology Specialist SSRSB

Works with students from K-12 and Early Intervention Program  
1 year prior to entering school. All abilities. All AT.  
Designs and teaches Graduate courses in Assistive Technology  
for Acadia University and St.Fx University  
PhD Student University of South Australia

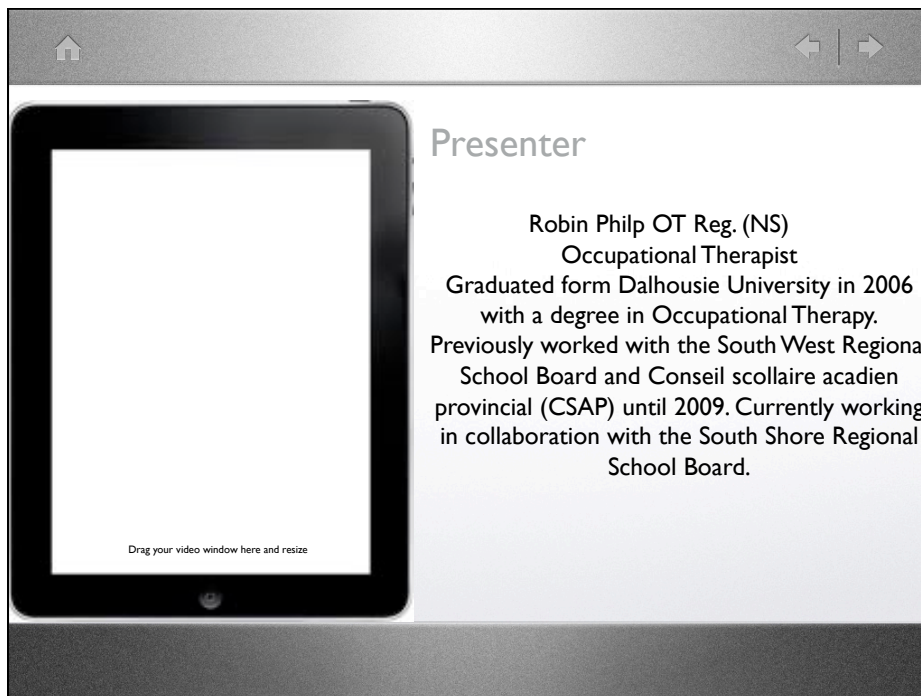
 Distinguished Educators



Presenter

Janelle Knickle OT Reg. (NS)  
Occupational Therapist  
Graduated from Dalhousie University in 2007 with a degree in Occupational Therapy. Has been working with South Shore Health and collaborating with South Shore Regional School Board since 2007 working with students from grade primary to 12.

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Presenter

Robin Philp OT Reg. (NS)  
Occupational Therapist  
Graduated form Dalhousie University in 2006 with a degree in Occupational Therapy. Previously worked with the South West Regional School Board and Conseil scolaire acadien provincial (CSAP) until 2009. Currently working in collaboration with the South Shore Regional School Board.

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**Presenter**


Barbara Cochrane

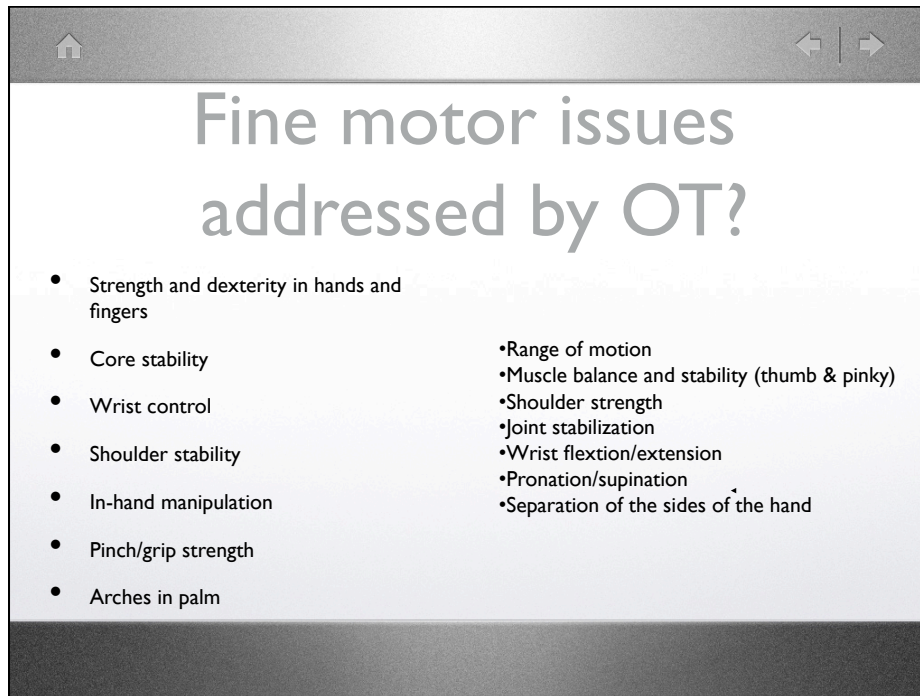
Program Planning Consultant SSRSB (MED, Special Education, BPE, Reading Recovery teacher; Facilitator Special Needs Module ) Works with School Based teams to assist with implementing the program planning process to determine appropriate programming and services and professional Development required by staff.

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## What are Fine Motor Skills?

- The ability to make precise coordinated movements using the muscles and joints of the wrist, hand and fingers.

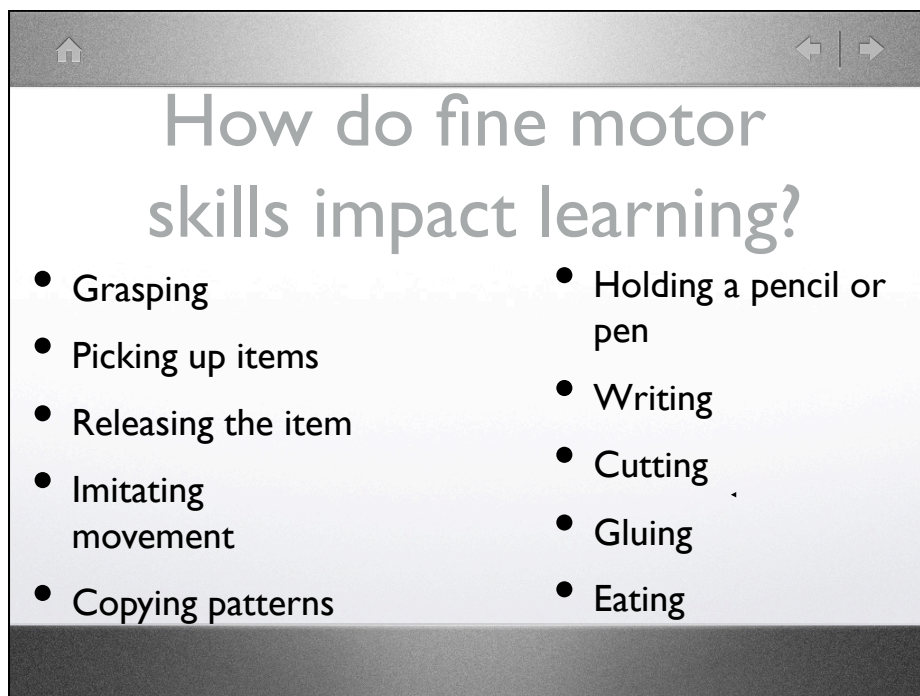




Home icon | Navigation arrows

## Fine motor issues addressed by OT?

- Strength and dexterity in hands and fingers
- Core stability
- Wrist control
- Shoulder stability
- In-hand manipulation
- Pinch/grip strength
- Arches in palm
- Range of motion
- Muscle balance and stability (thumb & pinky)
- Shoulder strength
- Joint stabilization
- Wrist flexion/extension
- Pronation/supination
- Separation of the sides of the hand



Home icon | Navigation arrows

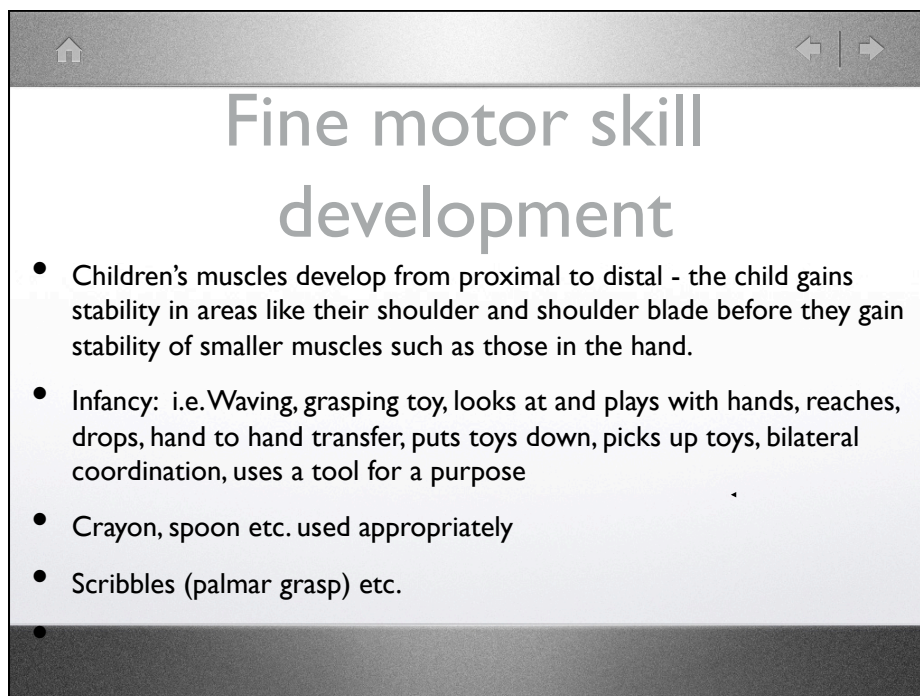
## How do fine motor skills impact learning?

- Grasping
- Picking up items
- Releasing the item
- Imitating movement
- Copying patterns
- Holding a pencil or pen
- Writing
- Cutting
- Gluing
- Eating



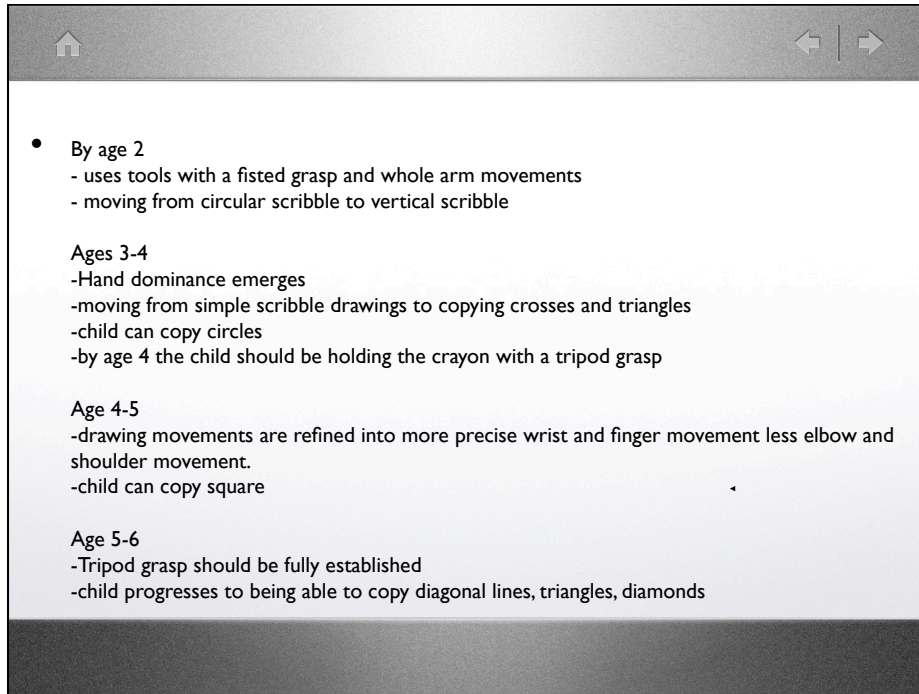
How do fine motor skills impact learning?

- Problem solving
- Task completion
- Associations with school and learning process
- Self esteem
- Motivation
- Engagement



Fine motor skill development

- Children's muscles develop from proximal to distal - the child gains stability in areas like their shoulder and shoulder blade before they gain stability of smaller muscles such as those in the hand.
- Infancy: i.e. Waving, grasping toy, looks at and plays with hands, reaches, drops, hand to hand transfer, puts toys down, picks up toys, bilateral coordination, uses a tool for a purpose
- Crayon, spoon etc. used appropriately
- Scribbles (palmar grasp) etc.



- By age 2
  - uses tools with a fistful grasp and whole arm movements
  - moving from circular scribble to vertical scribble

Ages 3-4

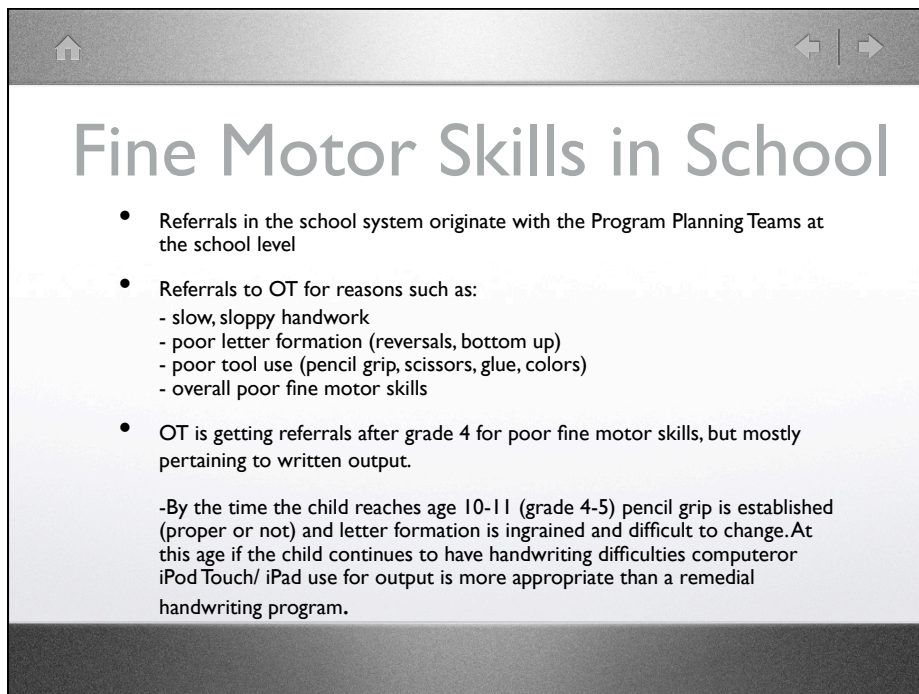
- Hand dominance emerges
- moving from simple scribble drawings to copying crosses and triangles
- child can copy circles
- by age 4 the child should be holding the crayon with a tripod grasp

Age 4-5

- drawing movements are refined into more precise wrist and finger movement less elbow and shoulder movement.
- child can copy square

Age 5-6

- Tripod grasp should be fully established
- child progresses to being able to copy diagonal lines, triangles, diamonds



## Fine Motor Skills in School

- Referrals in the school system originate with the Program Planning Teams at the school level
- Referrals to OT for reasons such as:
  - slow, sloppy handwork
  - poor letter formation (reversals, bottom up)
  - poor tool use (pencil grip, scissors, glue, colors)
  - overall poor fine motor skills
- OT is getting referrals after grade 4 for poor fine motor skills, but mostly pertaining to written output.
  - By the time the child reaches age 10-11 (grade 4-5) pencil grip is established (proper or not) and letter formation is ingrained and difficult to change. At this age if the child continues to have handwriting difficulties computer or iPod Touch/ iPad use for output is more appropriate than a remedial handwriting program.

The slide features a dark grey header with a home icon on the left and navigation arrows on the right. The main content area is white with a light blue gradient at the bottom. The title 'Fine Motor Skills in School' is centered in a large, grey font. A single bullet point is centered below the title.

## Fine Motor Skills in School

- If a child is experiencing fine motor dysfunction, the iPad apps can be used AS PART of a comprehensive fine motor skill remediation program which includes strengthening the upper extremity from shoulder to fingers as well as individual exercises to promote finger dexterity, strength and coordination. Consultation with occupational therapy for a comprehensive assessment and program development is encouraged.

The slide features a dark grey header with a home icon on the left and navigation arrows on the right. The main content area is white with a light blue gradient at the bottom. The title 'Fine Motor DOE outcomes examples' is centered in a grey font. A single bullet point is centered below the title, followed by three paragraphs of text.

## Fine Motor DOE outcomes examples


- GC 08: students will be expected to use writing and other forms of representation to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imagination
  - 9.1 create written media text using some familiar forms [e.g. lists, letters, personal narratives, retellings, messages, finger plays, drawings, puppetry] 9.2 demonstrated beginning of awareness of audience and purpose

GC 10: students will be expected to use a range of strategies to develop effective writing and media products to enhance their clarity, precision, and effectiveness.

10.2 students would be expected to use some conventions of written language

- Use drawings, letters, and approximations to record meaning
- Develop the concept of directionality left to right; top to bottom
- Establish one-to-one correspondence between spoken and written words
- Begin to use spacing between words
- Write complete sentences although they are not always punctuated correctly with.
- Understand that letters can be written in a Bryn Mawr case forms but often tend to use them indiscriminately

## Enlarge your video window



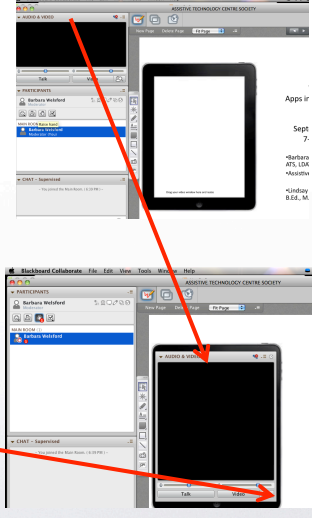
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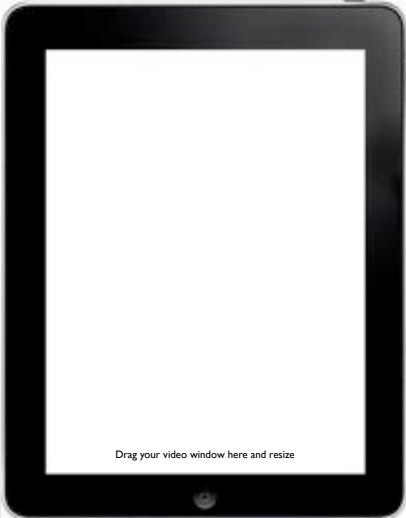
**1**

Hold down your mouse on the Audio and Video window toolbar and drag the window down to the iPad on the whiteboard

**2**


Click on the bottom right hand corner of the video window and drag down to the right to enlarge your view





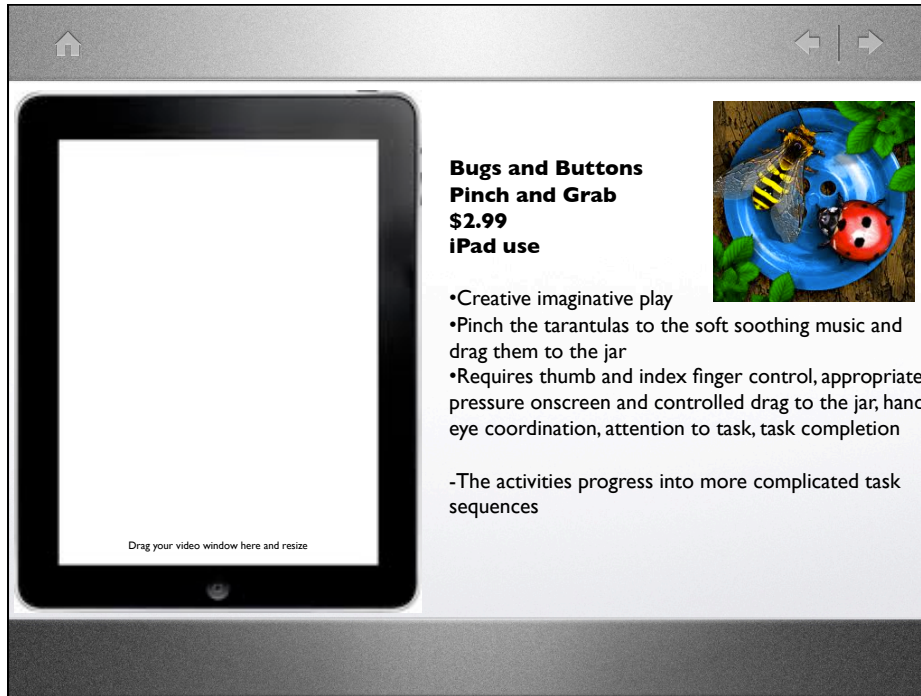
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**Dexterity**  
**\$4.99**  
 Use with the iPod Touch, iPad or iPhone




- Therapeutic hand exercises supporting and enhancing fine motor skills and writing readiness in children and adults
- Tracking and data collection
- Hand exercises that support and enhance fine motor skills and writing readiness
- promotes dexterity, finger sequencing, isolation and control
- supports Handwriting Without Tears principles
- A stylus can be used for the writing portion of the app
- pinch, tap, write
- designed in consultation with OT's





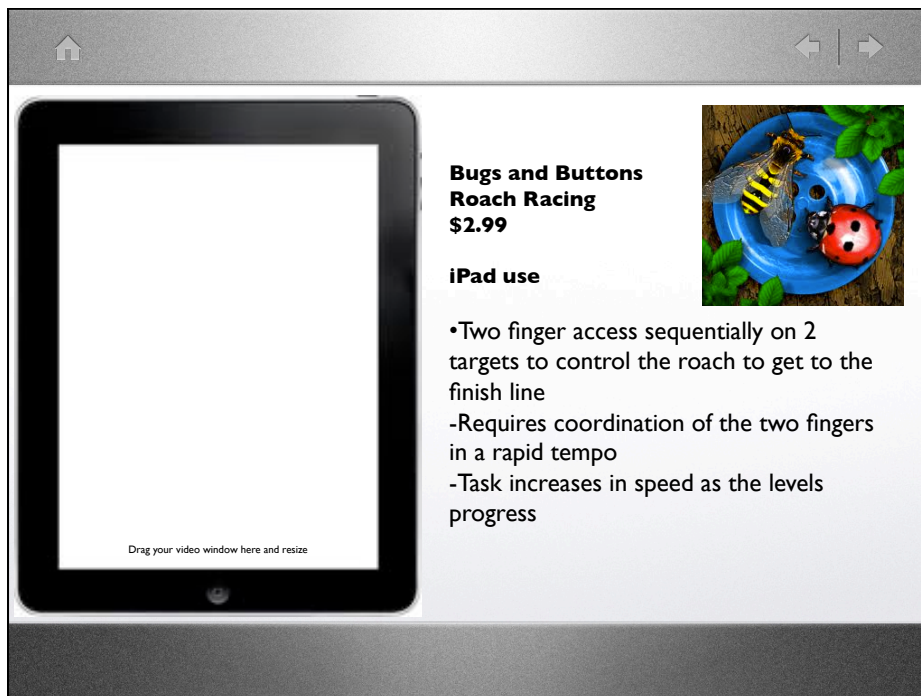
**Bugs and Buttons  
Pinch and Grab  
\$2.99  
iPad use**




- Creative imaginative play
- Pinch the tarantulas to the soft soothing music and drag them to the jar
- Requires thumb and index finger control, appropriate pressure onscreen and controlled drag to the jar, hand eye coordination, attention to task, task completion

-The activities progress into more complicated task sequences

Drag your video window here and resize

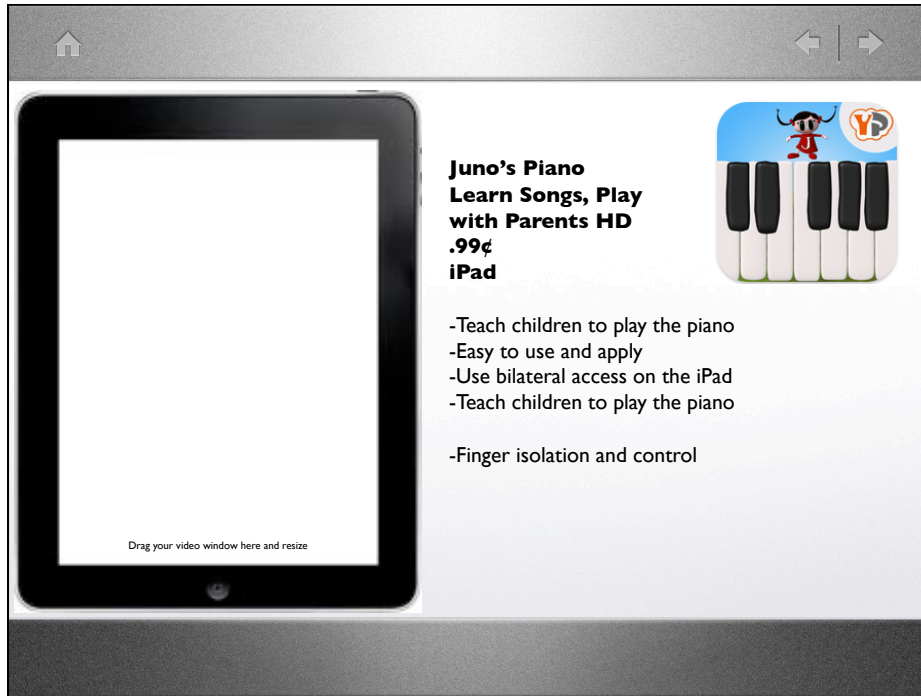


**Bugs and Buttons  
Roach Racing  
\$2.99  
iPad use**



- Two finger access sequentially on 2 targets to control the roach to get to the finish line
- Requires coordination of the two fingers in a rapid tempo
- Task increases in speed as the levels progress

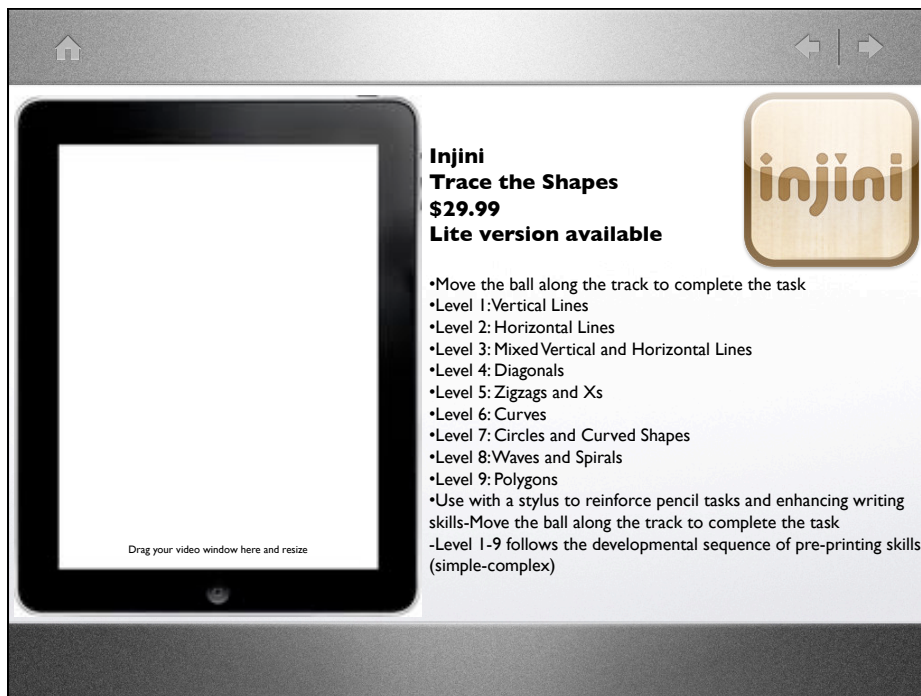
Drag your video window here and resize



The screenshot shows an iPad interface with a home button on the left and navigation arrows on the right. A large tablet icon on the left contains the text "Drag your video window here and resize". To the right, the app listing for "Juno's Piano" is displayed. The title is "Juno's Piano Learn Songs, Play with Parents HD" with a price of ".99¢" and "iPad" below it. A small icon of a piano keyboard with a character is to the right. Below the title, there are four bullet points: "-Teach children to play the piano", "-Easy to use and apply", "-Use bilateral access on the iPad", and "-Teach children to play the piano". A fifth bullet point, "-Finger isolation and control", is located below the main list.

**Juno's Piano**  
**Learn Songs, Play with Parents HD**  
**.99¢**  
**iPad**

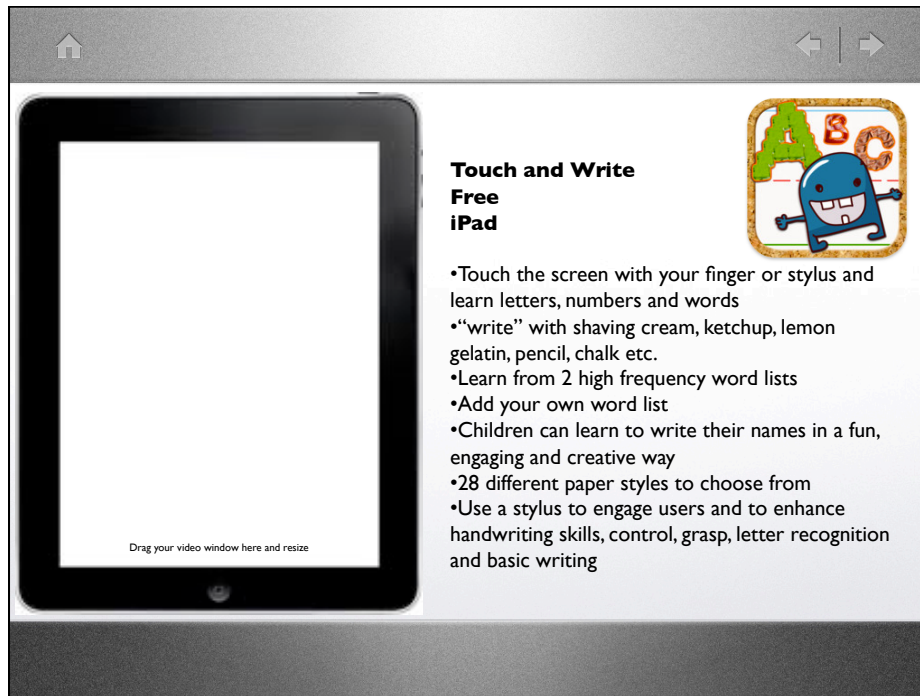
- Teach children to play the piano
- Easy to use and apply
- Use bilateral access on the iPad
- Teach children to play the piano
- Finger isolation and control




The screenshot shows an iPad interface with a home button on the left and navigation arrows on the right. A large tablet icon on the left contains the text "Drag your video window here and resize". To the right, the app listing for "Injini" is displayed. The title is "Injini Trace the Shapes" with a price of "\$29.99" and "Lite version available" below it. A small icon of the word "injini" in a rounded square is to the right. Below the title, there is a list of features and levels: "•Move the ball along the track to complete the task", "•Level 1: Vertical Lines", "•Level 2: Horizontal Lines", "•Level 3: Mixed Vertical and Horizontal Lines", "•Level 4: Diagonals", "•Level 5: Zigzags and Xs", "•Level 6: Curves", "•Level 7: Circles and Curved Shapes", "•Level 8: Waves and Spirals", "•Level 9: Polygons", "•Use with a stylus to reinforce pencil tasks and enhancing writing skills-Move the ball along the track to complete the task", and "-Level 1-9 follows the developmental sequence of pre-printing skills (simple-complex)".

**Injini**  
**Trace the Shapes**  
**\$29.99**  
**Lite version available**

- Move the ball along the track to complete the task
- Level 1: Vertical Lines
- Level 2: Horizontal Lines
- Level 3: Mixed Vertical and Horizontal Lines
- Level 4: Diagonals
- Level 5: Zigzags and Xs
- Level 6: Curves
- Level 7: Circles and Curved Shapes
- Level 8: Waves and Spirals
- Level 9: Polygons
- Use with a stylus to reinforce pencil tasks and enhancing writing skills-Move the ball along the track to complete the task
- Level 1-9 follows the developmental sequence of pre-printing skills (simple-complex)

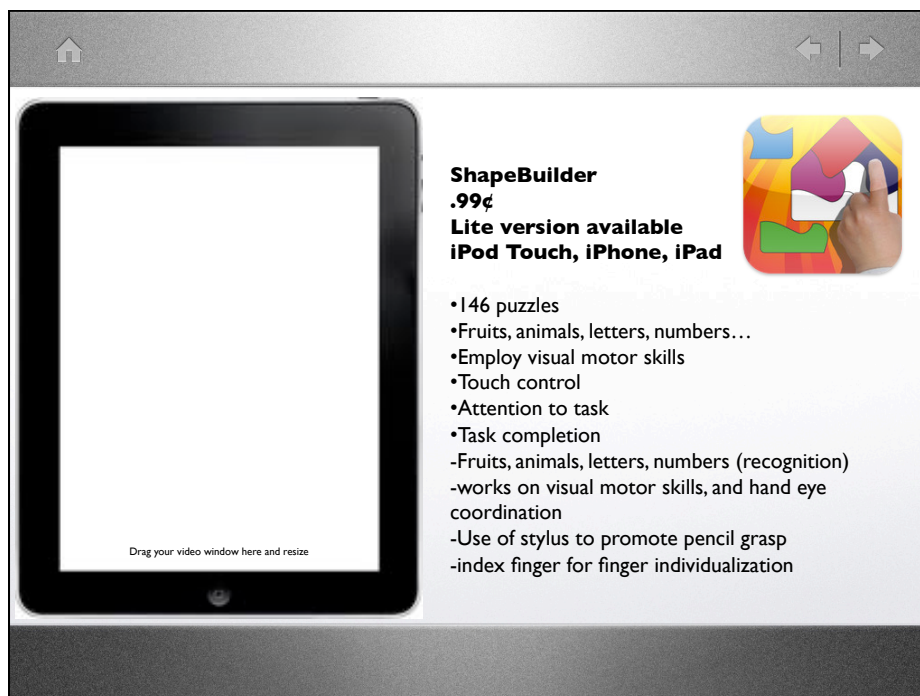


Touch and Write  
Free  
iPad




- Touch the screen with your finger or stylus and learn letters, numbers and words
- “write” with shaving cream, ketchup, lemon gelatin, pencil, chalk etc.
- Learn from 2 high frequency word lists
- Add your own word list
- Children can learn to write their names in a fun, engaging and creative way
- 28 different paper styles to choose from
- Use a stylus to engage users and to enhance handwriting skills, control, grasp, letter recognition and basic writing

Drag your video window here and resize

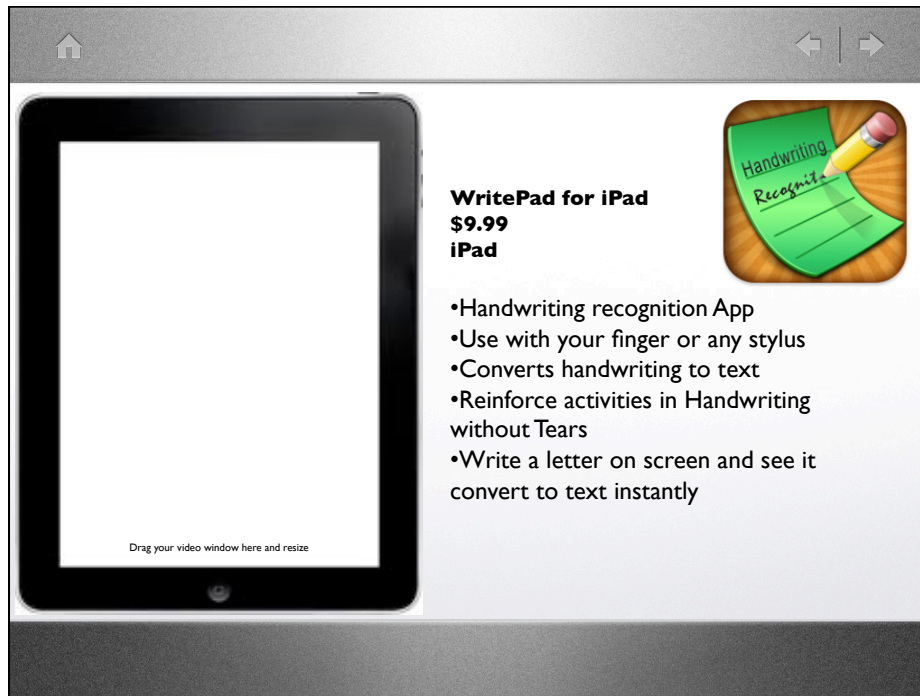


ShapeBuilder  
.99¢  
Lite version available  
iPod Touch, iPhone, iPad




- 146 puzzles
- Fruits, animals, letters, numbers...
- Employ visual motor skills
- Touch control
- Attention to task
- Task completion
- Fruits, animals, letters, numbers (recognition)
- works on visual motor skills, and hand eye coordination
- Use of stylus to promote pencil grasp
- index finger for finger individualization

Drag your video window here and resize

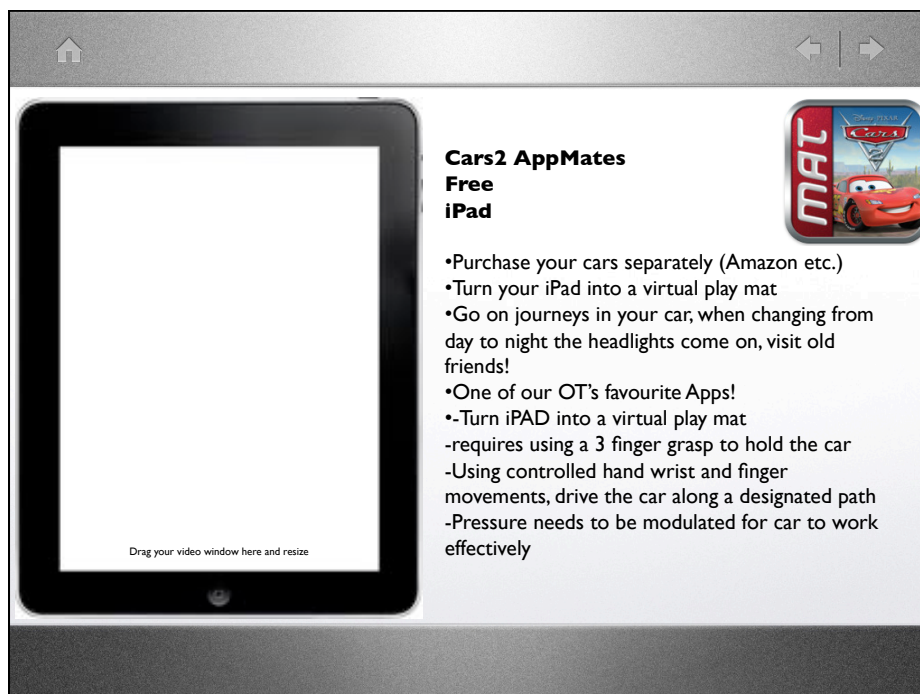


The screenshot shows an iPad interface with a home button at the top left and navigation arrows at the top right. On the left is a large, empty white rectangle representing the app's interface, with the text "Drag your video window here and resize" at the bottom. To the right of the rectangle is the app's title and price, followed by a list of features and an app icon.

**WritePad for iPad**  
**\$9.99**  
**iPad**




- Handwriting recognition App
- Use with your finger or any stylus
- Converts handwriting to text
- Reinforce activities in Handwriting without Tears
- Write a letter on screen and see it convert to text instantly

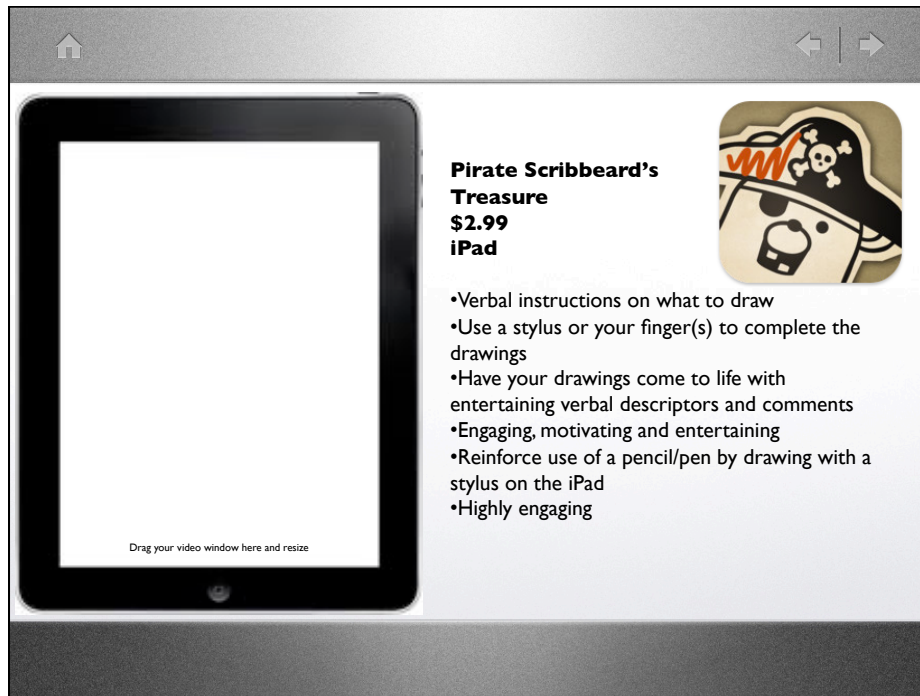


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**Cars2 AppMates**  
**Free**  
**iPad**

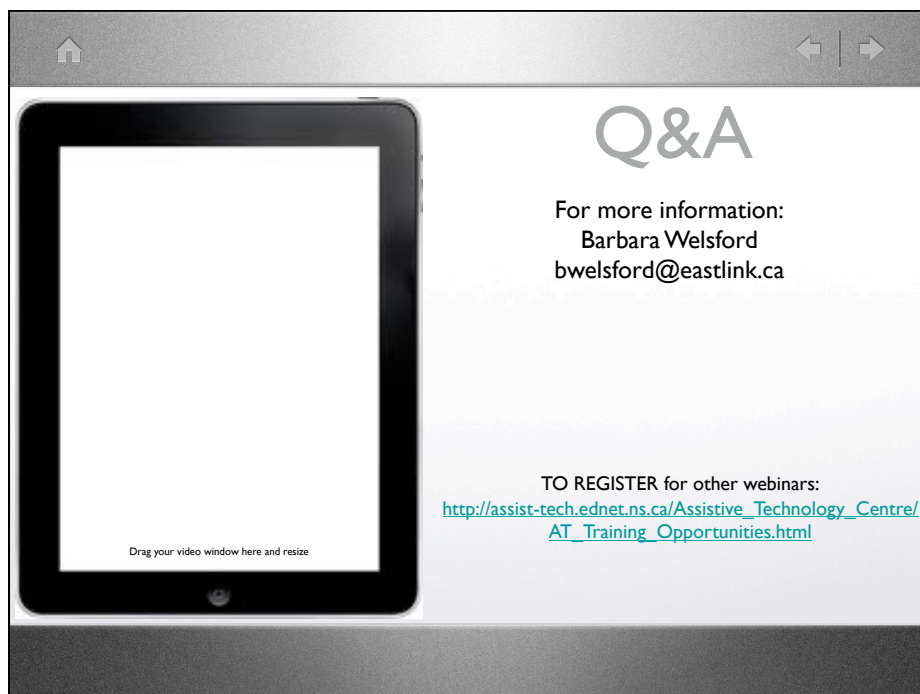


- Purchase your cars separately (Amazon etc.)
- Turn your iPad into a virtual play mat
- Go on journeys in your car, when changing from day to night the headlights come on, visit old friends!
- One of our OT's favourite Apps!
- Turn iPad into a virtual play mat
- requires using a 3 finger grasp to hold the car
- Using controlled hand wrist and finger movements, drive the car along a designated path
- Pressure needs to be modulated for car to work effectively



The screenshot shows an iPad interface with a home button and navigation arrows at the top. On the left is a large, empty iPad frame with the text "Drag your video window here and resize" at the bottom. To the right, the app title "Pirate Scribbeard's Treasure" is displayed in bold, followed by the price "\$2.99" and the platform "iPad". A small icon of a pirate character is shown to the right of the text. Below the title and price is a bulleted list of features:

- Verbal instructions on what to draw
- Use a stylus or your finger(s) to complete the drawings
- Have your drawings come to life with entertaining verbal descriptors and comments
- Engaging, motivating and entertaining
- Reinforce use of a pencil/pen by drawing with a stylus on the iPad
- Highly engaging



The screenshot shows an iPad interface with a home button and navigation arrows at the top. On the left is a large, empty iPad frame with the text "Drag your video window here and resize" at the bottom. To the right, the text "Q&A" is displayed in a large, light gray font. Below this, the text "For more information: Barbara Welsford bwelsford@eastlink.ca" is shown. At the bottom right, the text "TO REGISTER for other webinars:" is followed by a blue hyperlink: [http://assist-tech.ednet.ns.ca/Assistive\\_Technology\\_Centre/AT\\_Training\\_Opportunities.html](http://assist-tech.ednet.ns.ca/Assistive_Technology_Centre/AT_Training_Opportunities.html)