

# iPad in Education

**Implementing the Apple iPad in teaching  
and learning environments**

**THOUGHTS ON PEDAGOGY**



**EMBODIED EMBEDDED COGNITION**



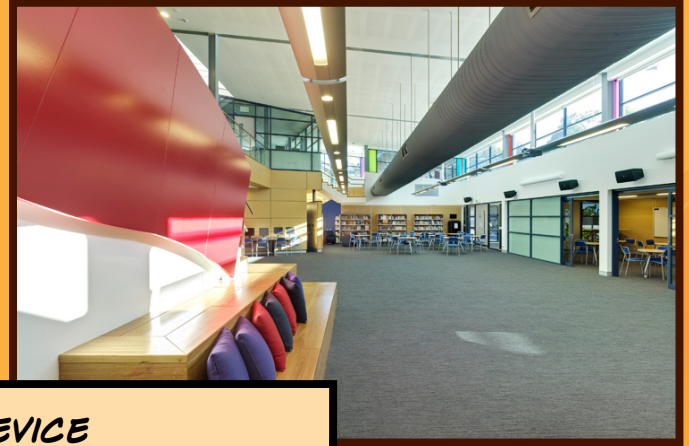
- \* BRAIN, BODY AND MIND INTERPLAY
- \* SITUATED COGNITION AND LEARNING
- \* LEARNING IS A JOURNEY
- \* THE STUDENT IS NOT AN EMPTY CONTAINER TO BE FILLED
- \* STUDENT SEEKS STATES OF CHANGE AND STIMULUS TO ACT
- \* DYNAMIC SYSTEMS THEORY

**PROCESS AND PRODUCTS NOT TOOLS AND MEDIA  
FACILITATE TRANSFORMATION  
PROMOTE A CHANGE IN STATE  
SIMPLE NOT COMPLEX**

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## APPROPRIATE USE

- \* WILL NOT REPLACE LAPTOPS OR DESKTOPS... NOT YET
- \* IS AN ADJUNCT TO THE PERSON
- \* EACH USER INTERACTS WITH THESE DEVICES DIFFERENTLY



- \* IT IS A MOBILE DEVICE
- \* UBIQUITOUS LEARNING ENVIRONMENTS
- \* DO NOT SIT IN ROWS IN CLASSROOMS
- \* FIELD RELATED APPLICATIONS



## IN THE FIELD



- \* PHOTOGRAPHY
- \* AUDIO RECORDING
- \* VIDEO RECORDING
- \* SKETCHING



- \* NO MOVING PARTS
- \* GOOD BATTERY LIFE
- \* TOUCH SCREEN
- \* DATA RECORDING



## WORKING WITH THE IPAD

- \* BYOD
- \* BYOA
- \* MAKE THE DEVICE "DISAPPEAR"
- \* MODEL THE OUTCOMES
- \* BE "DEVICE INDEPENDENT"

- \* PLAY
- \* EXPERIMENT
- \* SHARE YOUR DISCOVERIES
- \* ASK
- \* ENCOURAGE EXPERTS

## TYPICAL QUESTIONS

- \* WHERE IS THE HARD DRIVE ICON?
- \* WHERE ARE THE FILES AND FOLDERS?!
- \* HOW COME IT DOES NOT WORK LIKE A THUMB DRIVE?
- \* HOW DO I EJECT IT?

- \* WHERE ARE THE FILES?
- \* WHERE ARE THE FOLDERS?
- \* HOW DO YOU UPLOAD?
- \* HOW DO YOU DOWNLOAD?
- \* I CAN ONLY SEE APPS...



LOOK AT ALL THESE APPS!!!

- \* SOME APPS ARE FREE
- \* SOME APPS ARE NOT FREE
- \* FREE DOES NOT EQUATE WITH GOOD
- \* VAST MAJORITY OF APPS ARE USELESS
- \* FEW APPS ARE PRACTICAL

- \* NO MOUSE
- \* NO KEYBOARD
- \* NO HARD DRIVE CASE
- \* NO TOWER
- \* NO CABLES

- \* WHERE IS THE USB PORT?
- \* WHERE IS THE VGA PORT?
- \* WHERE IS THE DVD DRIVE?
- \* HOW DO I ADD PHOTOGRAPHS?
- \* HOW DO I ADD DOCUMENTS?
- \* WHERE IS THE KEYBOARD?



## IMPLEMENTATION

**IPAD OWNERSHIP:** INSTITUTION OR STUDENTS?  
**APP PURCHASE:** INSTITUTION OR STUDENTS?  
**POWER SUPPLY:** INSTITUTION OR STUDENTS?  
**SAFEKEEPING:** INSTITUTION OR STUDENTS?  
**MAINTENANCE:** INSTITUTION OR STUDENTS?  
**NETWORK ACCESS:** INSTITUTION OR STUDENTS?



- \* **INVESTIGATE** A COST MODEL FOR INFRASTRUCTURE, TECHNOLOGY AND SERVICES.
- \* **STUDY** THE REQUIREMENTS OF ALL THOSE INVOLVED IN THE USE OF THE TECHNOLOGY (LEARNERS, TEACHERS, CONTENT CREATORS) TO ENSURE IT IS USABLE AND ACCEPTABLE.
- \* **ASSESS** THAT THE TECHNOLOGY IS SUITED TO THE LEARNING TASK AND

- \* **ASSIGN** THE NECESSARY ROLES FOR INITIATING AND THEREAFTER SUPPORTING MOBILE LEARNING
- \* **DEVELOP** PROCEDURES AND STRATEGIES FOR THE MANAGEMENT OF EQUIPMENT WHEN IT IS PROVIDED BY THE INSTITUTION
- \* **PROVIDE** TRAINING AND (ONGOING) TECHNICAL SUPPORT TO THE TEACHERS TO ENABLE STAFF TO USE MOBILE TECHNOLOGIES TO ENHANCE CURRENT AND TO ENABLE NEW INSTRUCTIONAL ACTIVITIES.

- \* **CONSIDER** THE USE OF MOBILE TECHNOLOGIES FOR STUDENT ADMINISTRATION TASKS
- \* **PLAN** THE USE OF MOBILE TECHNOLOGIES TO SUPPORT COLLABORATIVE AND GROUP LEARNING.
- \* **DISCOVER** AND ADOPT SUITABLE APPLICATIONS THAT MATCH THE NEEDS OF YOUR SPECIFIC CLASSROOM AND MAP DIRECTLY TO YOUR CURRICULUM NEEDS.
- \* **ENSURE** SECURITY AND PRIVACY FOR THE END USERS.



# PROGRAMMING LESSONS

## TRY DIFFERING APPROACHES

- \* CURRICULUM MAPPING ~ MATRICES
- \* SHORT SHARP UNITS OR TOPICS
- \* SEMESTER LENGTH STUDIES
- \* COLLABORATIONS

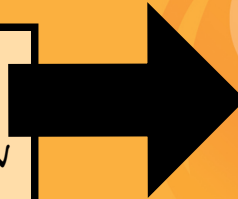


## CONSIDER THE...

- \* URGENCY OF THE LEARNING NEED
- \* NEED FOR KNOWLEDGE ACQUISITION
- \* MOBILITY OF THE LEARNING SETTING
- \* INTERACTIVITY OF THE LEARNING PROCESS
- \* SITUATION OF THE INSTRUCTIONAL ACTIVITIES
- \* INTEGRATION OF INSTRUCTIONAL CONTENT

## PREPARATION

- \* BRAINSTORM OR MAP OUT YOUR LESSON IDEA
- \* DEVELOP A STORYBOARD
- \* GATHER YOUR DIGITAL RESOURCES

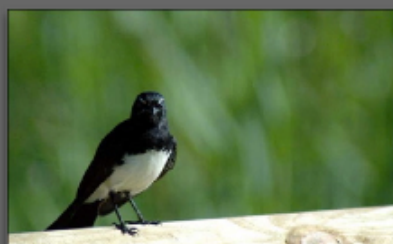


- \* PHOTOGRAPHS
- \* IMAGES
- \* AUDIO
- \* VIDEO
- \* TEXT



⇒ Background Music	23	✓ Door Opening And Closing
⇒ Evom	24	✓ Electrical Lock (Footsteps Exit/Enter)
⇒ John_Larkin's Playlist	25	✓ Small Motor Cycle In Traffic
⇒ Listening Exam	26	✓ Creaking Door Opens
⇒ Presentation	27	✓ Creaking Door Close
⇒ Protest Songs	28	✓ Jail Door Open, Close
⇒ Relaxation - Relaxation Activities	29	✓ Door Slamming
⇒ Sound FX	30	✓ Footsteps Up Steps, Key In Lock, Door...
	31	✓ Car Door Closes

- ☐ Clip Art
- ☐ Fauna
- ☐ Themes
- ☐ Inanimate
- ☐ Hunger City
- ☐ People



## Albums

- ☐ meteorological
- ☐ Astronomical
- ▼ ☒ Resources
  - ☒ Clip Art
  - ☒ Fauna
  - ☒ Themes
  - ☒ Inanimate
  - ☒ Hunger City
  - ☒ People

# PROGRAMMING LESSONS

CHOOSE AN APP

WHICH OUTPUT DO YOU PREFER?

- \* **GRAPHIC STORY:** COMIC LIFE
- \* **HYPERTEXT STORY:** COMPOSER
- \* **NEVER-ENDING STORY:** POSTEROUS
- \* **TWO MINUTE MOVIE:** REEL DIRECTORS, IMOVIE, SPLICE
- \* **PHOTOGRAPHIC STORY:** REEL DIRECTOR
- \* **ORAL HISTORY:** GARAGEBAND, QUICKVOICE
- \* **COLLABORATIVE STORY:** WORDPRESS, POSTEROUS





# POSITIVES AND NEGATIVES

- \* ANYTIME, ANYWHERE
- \* ENHANCED INTERACTIONS BETWEEN STUDENTS AND INSTRUCTORS
- \* PERFORMANCE SUPPORT OPPORTUNITIES

APPEAL TO TECH SAVVY STUDENTS

- \* SUPPORT DIFFERENTIATED LEARNING STYLES

FACILITATE COLLABORATION

## POSITIVES

- \* TRUE MOBILITY
- \* PERSONALISED LEARNING
- \* NOT ALWAYS RELIANT ON NETWORKS IF APP IS SELF CONTAINED
- \* RELIEVE THE ROLE OF ICT IN INSTITUTIONS
- \* REPURPOSE COMPUTER LABS

- \* REKINDLE INTEREST IN READING?
- \* A SOLUTION TO HEAVY STUDENT BACK-PACKS?
- \* REDUCE TEXT-BOOK COSTS IN THE LONG TERM?

- \* A NEW HUMAN COMPUTER INTERFACE PARADIGM...
- \* LACK OF FLASH SUPPORT ~ TRY SKYFIRE APP (\$2.99)
- \* NO CAMERA
- \* NO SD CARD OR TRADITIONAL USB SLOT
- \* MANY POOR QUALITY APPS ~ PROMISE MUCH ~ DELIVER LITTLE
- \* PASSCODE LOCKS

## NEGATIVES

- \* DESIGNED FOR AN INDIVIDUAL
- \* NOT MEANT TO BE "SHARED"
- MULTIPLE USER ACCOUNTS NOT POSSIBLE
- \* DOES NOT MOUNT AS A VOLUME OR DISK
- \* INCONSISTENT APPROACH TO FILE TRANSFER
- \* LIMITED VGA OUTPUT SUPPORT ON IPAD1

- \* IT IS A CLOSED DEVICE
- \* PROPRIETARY APPLE ENVIRONMENT
- \* ADDED COST OF PERIPHERALS
- \* NO SENSE OF OWNERSHIP - CANNOT "PLAY" OR "EXPLORE" THE SYSTEM
- \* CANNOT PULL IT APART
- \* SOME FEEL IT IS PURELY A GLORIFIED TEXTBOOK