

# Exploring how children collaborate when using an iPad in pairs

Pinsuda Srisontisuk, PhD Candidate



## Background

The mobility, accessibility and usability of touch-screen technology has allowed younger children to access these type of devices. Although there is increasing research that highlights the potential benefits of learning from tablets, there is still concern that the technology time away from children engaging in other social activities. This research aims to explore how children collaborate when using an iPad with another child.

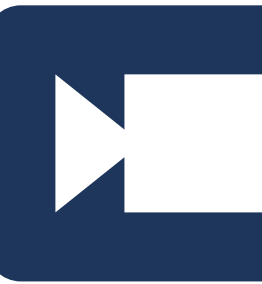


## THE PROBLEM



## Method

This study employed a design based research approach, in which the practitioners helped design an activity for the children to use an iPad in pairs. The app used was the open-ended story creator "Our Story".



Video data was collected from two early years educational setting. The video data looked at children (age 4-6) working in pairs on the iPad.

## Analysis

In order to explore the complex phenomenon of collaboration, a mixed method approach was adopted to investigate the childrens' behaviour.

## THE RESEARCH

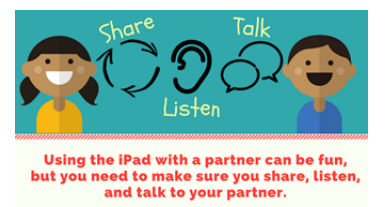
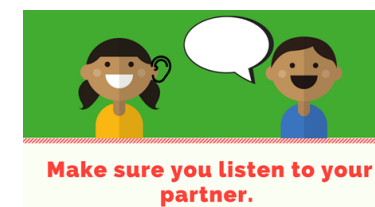
Eye gaze is used to monitor the level of engagement from the pair.



Contact is used to explore the sharing of resources and types of interaction with the technology.



Turn taking and talk is used to explore the type of negotiation that occurs between the pair.



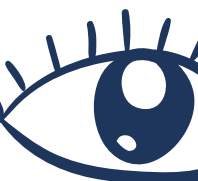
As part of the activity design a short story was created and integrated into the app to help scaffold collaborative behaviours (examples above).



## Some Results

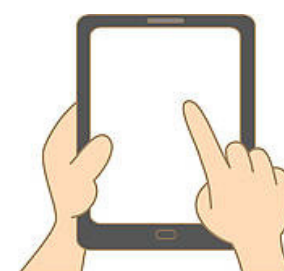
### Eye Gaze

Most pairs are highly engaged in the activity with a high percentage of their gaze being joint attention towards the iPad.



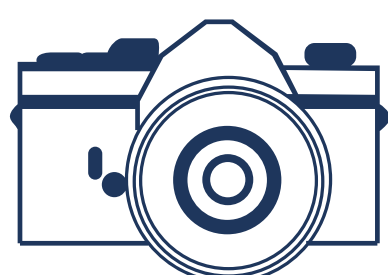
### Contact

There is usually a dominant child in the pair and this remains consistent even when the activity is redesigned.

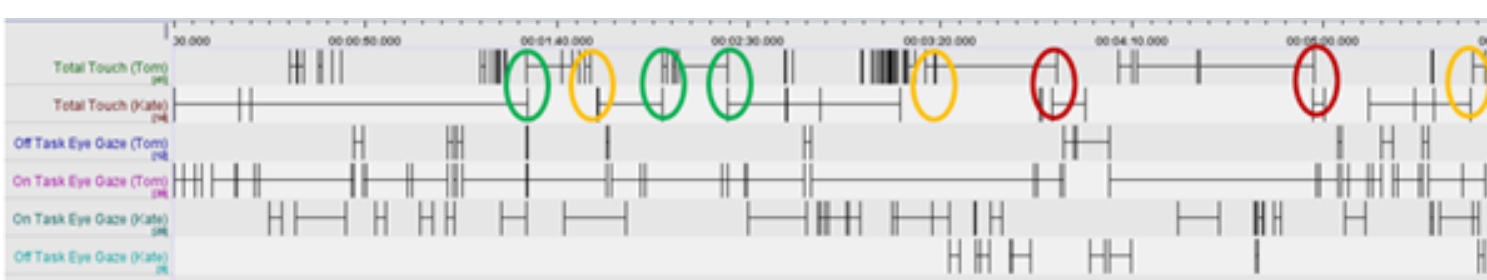


### Turn Taking & Talk

Key features of mobile device such as photo taking, allows for goal interdependence and makes turn taking occur more frequently and naturally.



## Example of Analysis



This is part of a timeline from the video recording. Each circle indicates when there is a transfer of possession and how often the children take turns using the iPad. The color indicates if they shared nicely (green) or if there was conflict (red).

Does this pair look they were working well together?

Supervisors:  
Prof David Messer  
Prof Agnes Kukulska-Hulme  
Dr Natalie Canning



LEVERHULME  
TRUST

