



The  
University  
Of  
Sheffield.

# Early Literacy Development in the Digital Age

Professor Jackie Marsh  
University of Sheffield



Surface

Th21/Qual mid2

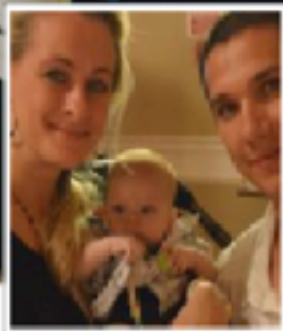
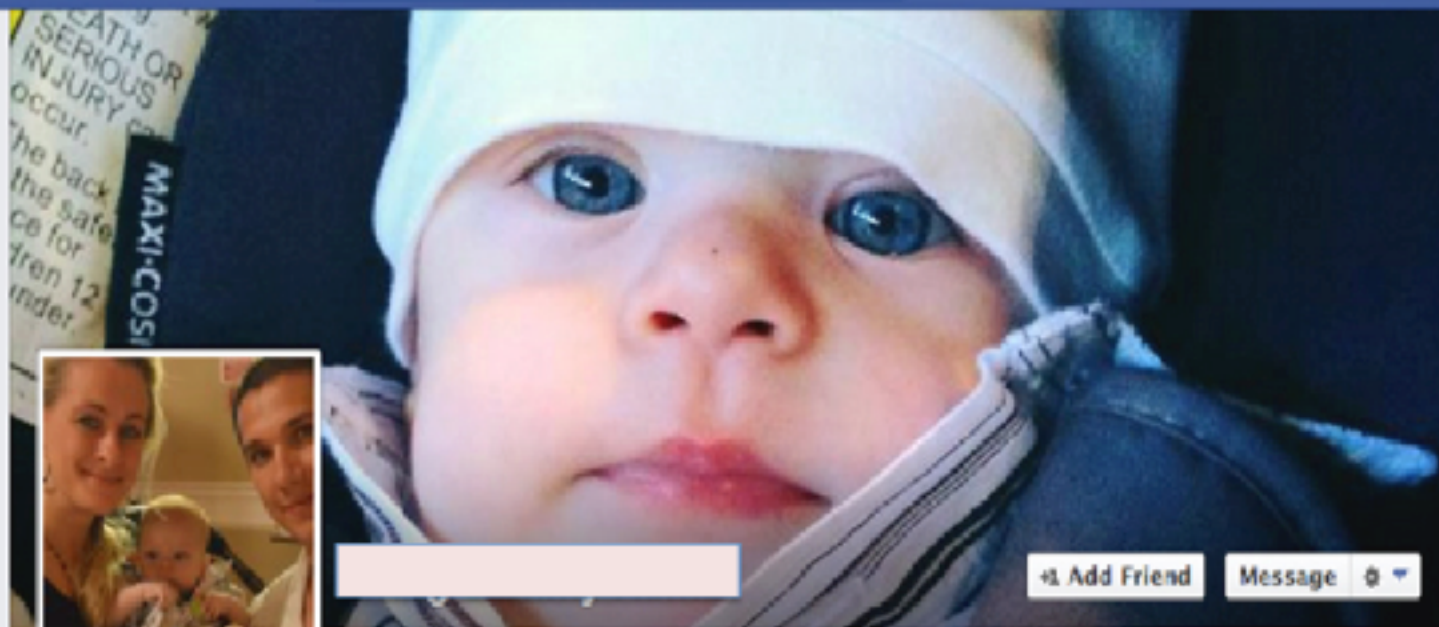
B59°/V70°

Mix66/34

SRI II 1

3D Static





[Redacted Name]

[Add Friend](#)[Message](#)[Timeline](#)[About](#)[Friends](#)[Photos 1](#)[More ▾](#)

Do you know

To see what she shares with friends, send her a friend request.

[Add Friend](#)





# MULTIMODALITY

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*Linguistic*

*Gestural*

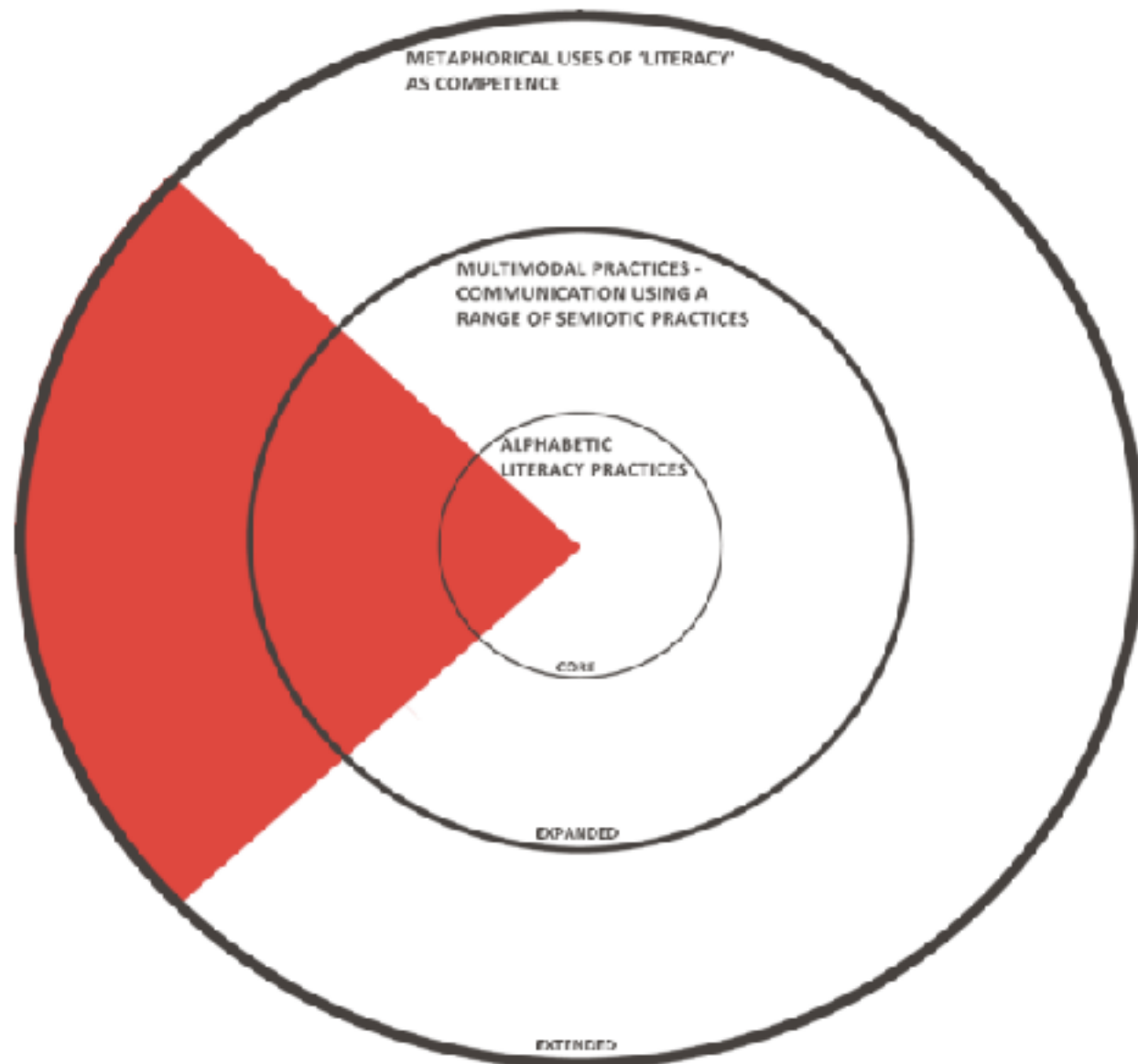
*Spatial*

*Aural*

*Visual*

‘Mode is a socially shaped and culturally given semiotic resource for making meaning.’

(Kress, 2010, p.79)



Multiliteracies...

# Multiliteracies at home

...



# Gareth







Film



Apps



Bricks

Games





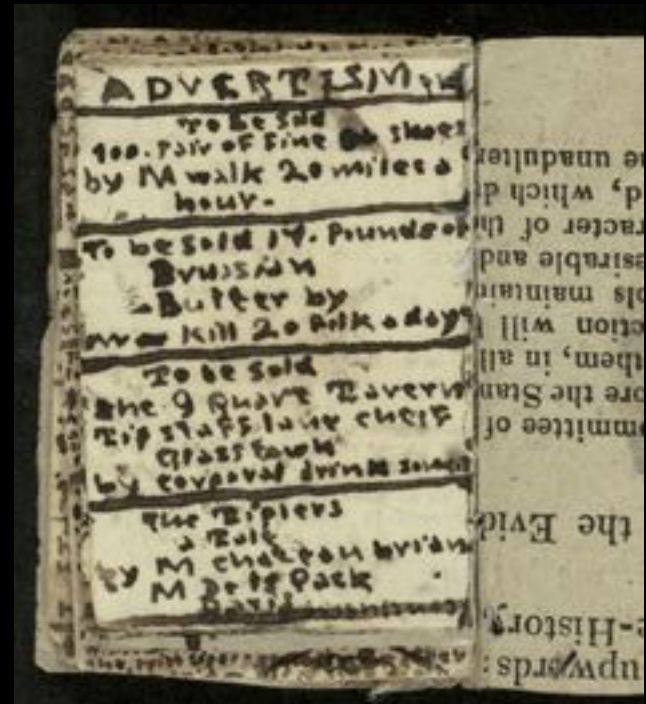
0:51 / 5:52



Lego Star Wars Video. MADE BY A KID, FOR KIDS :)



seanyuorstuff





## Friendly Aliens



The Lurks are the only beings in the galaxy who are friendly and helpful. They are also very smart. They have a hard job to do - to protect the planet from the evil and mean aliens. What Lurks are very smart and helpful. Would you like to be a Lurk?

### Jan Jan Bunch

Jan Jan is a very smart and very helpful alien. He has a long neck and a long tail. He is very smart and very helpful.

### Gungan Soldier

The Gungans live in the swampy planet of Naboo. This brave soldier fights off the evil and mean aliens with his sword and shield.

### Wookiee Warrior

The Wookiees live on the planet of Kashyyyk. This brave warrior fights off the evil and mean aliens with his sword and shield.

### Onacanda Parr

Onacanda Parr is a brave and smart alien. He has a long neck and a long tail. He is very smart and very helpful.

### Wicket W. Warrick

Wicket W. Warrick is a brave and smart alien. He has a long neck and a long tail. He is very smart and very helpful.

### Lurks

The Lurks are the only beings in the galaxy who are friendly and helpful. They are also very smart. They have a hard job to do - to protect the planet from the evil and mean aliens. What Lurks are very smart and helpful. Would you like to be a Lurk?

### Chief Oonga

Chief Oonga is a brave and smart alien. He has a long neck and a long tail. He is very smart and very helpful.

### Wicket

Wicket is a brave and smart alien. He has a long neck and a long tail. He is very smart and very helpful.

# Marsh et al. (2017) Young children's initiation into family literacy practices in the digital age.

**Table 3.** Range of practices recorded by parents using the digital camcorder.

---

Singing/dancing/talking to TV (6)
Watching TV on own (3)
Watching TV with sibling/friend (3)
Watching TV with parent (2)
Using an electronic toy (5 – Barbie Laptop; alphabet recognition toy; Bob the Builder phone; spelling toy; Buzz Lightyear model)
Using mobile phone to talk to imaginary person (2)
Using mobile phone to take photographs (2)
Using a laptop to play a game (2)
Using a laptop with parental help (2)
Watching a film that is projected on a large scale, cinema-style (2)
Attempting operational procedures with hardware (2)
Using mobile phone to talk to real person (1)
Using a laptop to watch video clips on YouTube (1)
Using a laptop with a friend (1)
Using mobile phone to engage in a video call (1)
Using mobile phone to listen to music (1)
Using a digital camcorder (1)
Using a dishwasher (1)
Using a CD player (1)
Using headphones (1)

---



# Multiliteracies at school

...

# Coding

Scratch Jr



Kodable



Problem-  
solving

Logic

Creativity

Daisy the  
Dinosaur



Move the Turtle



*Spore*



*Voki*

Role play



Digital creativity

Monsters  
topic

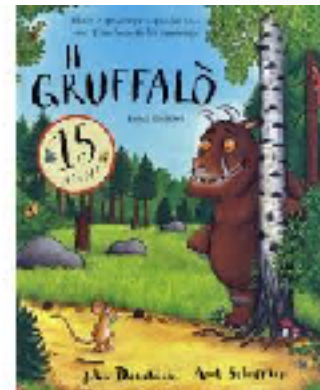
Art and craft



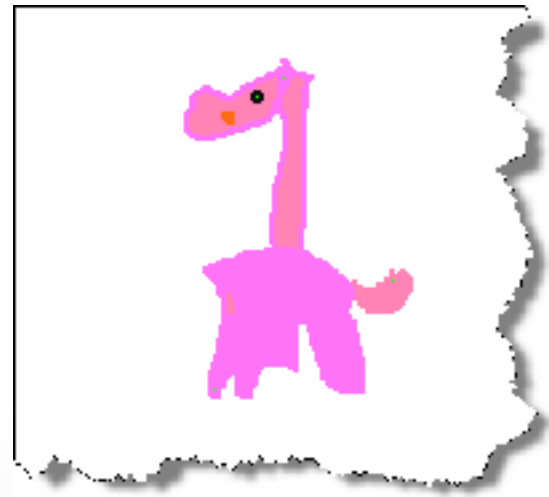
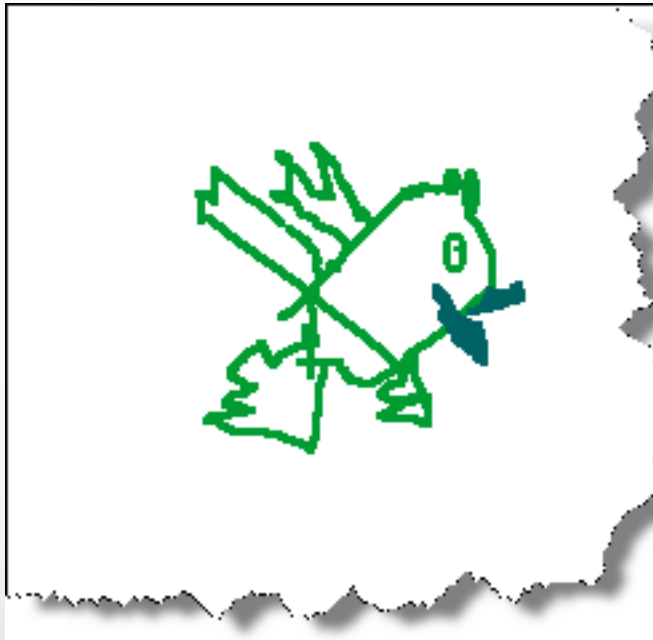
Small-world play



Reading and writing



# Coding using "Scratch"





Motion

Control

Looks

Sensing

Sound

Operators

Pen

Variables



Sprite 1



x: 0

y: 0

direction: 90

Scripts

Costumes

Sounds

jasmine scratch



hello

move 20 steps

turn 25 degrees

turn 15 degrees

point in direction 90

point towards

go to x: -6 y: 1

go to

glide 5 secs to x: -5 y: 1

change x by 20

set x to 0

change y by 7

set y to 0

if on edge, bounce

x position

y position

direction

when clicked

forever

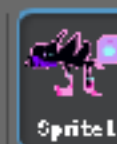
glide 2 secs to x: 0 y: 0

say Hello for 1 secs



&gt; 256

y: -324



Sprite 1



Stage



when  clicked

say Hello! for 2 secs

wait 4 secs

say do you want to come to my fun fair today? for 3 secs

wait 3 secs

think hmmm maybe we can play lolldoris pop maybe she will like that for 12 secs

wait 14 secs

say see you at seven,0,clock emma for 2 secs

wait 1 secs



# scratch monsters monteney 1

from [deftoer3](#)



Hmm...



01:28



vimeo

# Coding and storytelling

- Provides an interesting context for learning coding - otherwise it can become decontextualised and arid
- Learning multiple languages - coding language and oral/ written language
- Some of the newer coding equipment fosters storytelling e.g. Cubetto and Ozbots



Ozobots

Cubetto



# Drawing, early mark-making and writing

Doodle Buddy



Using line,  
shape, form,  
exploring  
shapes and  
patterns

Brushes



Letter  
formation

Oral skills

Draw and Tell



Sago Mini-  
Doodlecast









@Mrs\_Cosgrove @MundellaComets  
mundellacomets.wordpress.com  
kcosgrove@mundella.sheffield.sch.uk



# Bigger Bloom

Mundella KS1 iPads painting project  
Kate Cosgrove











# Mark-making on tablets

- Good experience as the child can undo marks if they wish to
- Texts produced can be exported, displayed in various venues, and so on - versatile and portable.

# Sharrow Nursery: On The Farm

## Children's Work About Farm Animals



[Home](#)

[Main Website](#)

FEATURED

## Home

Welcome to our Sharrow Nursery blog. We have been learning about the farm and using digital equipment to record, draw and take photographs.

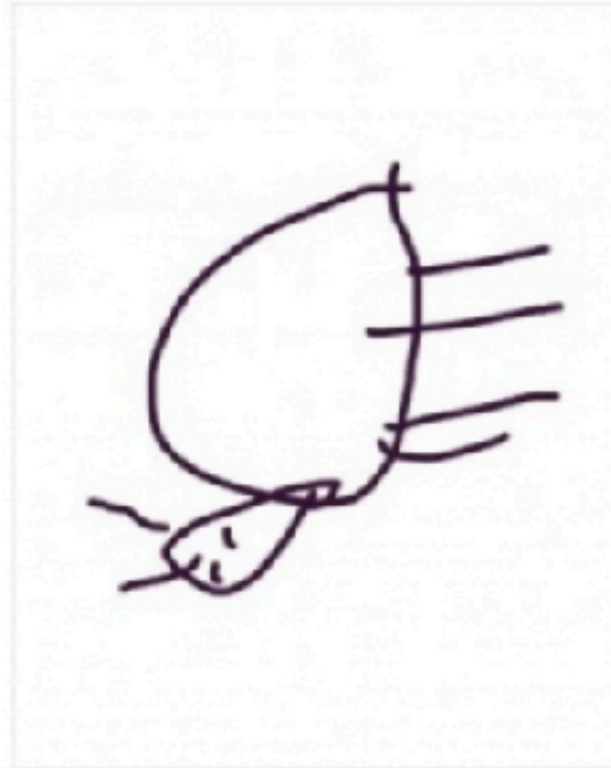
Click on your child's name to look at their work.

CHILD / CATEGORY

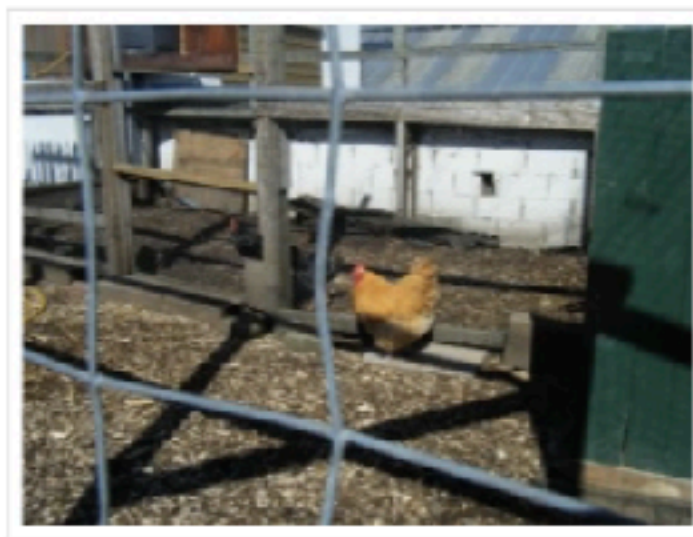
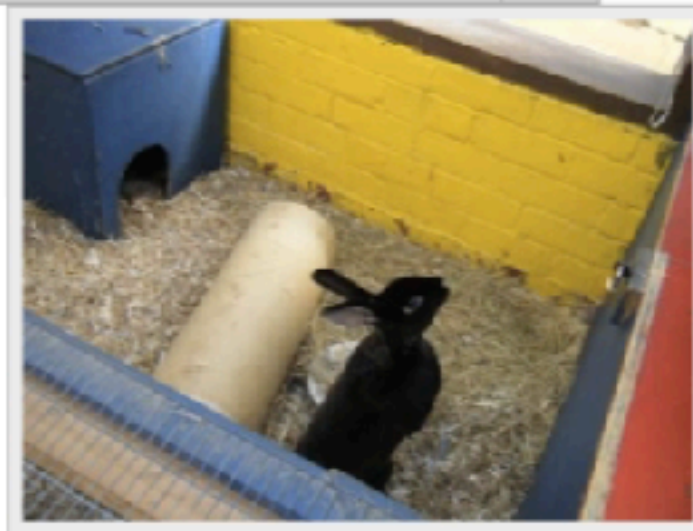
- [Abdallahman](#)
- [Aiza](#)
- [Aleena](#)
- [Alia](#)
- [Alisha](#)
- [Alisha](#)

# See our iPad drawings from the farm.

Posted on [May 28, 2012](#) by [nursery](#)









# SHARROW CONSTRUCTION BUDDIES

Two very special friends who are responsible for letting us all know about the progress of the design and construction of the new primary school due for completion summer 2007. Latest postings are at the top. E-mail comments to [brixandmorta@hotmail.co.uk](mailto:brixandmorta@hotmail.co.uk)

## Green Roof Construction

How to construct pitched and flat green roofs. Download CAD details.

## lawson robb associates

contemporary architecture and interior design

Ads by Google

WEDNESDAY, APRIL 09, 2008

We have a new job! We're helping with literacy...that's reading and writing to you and me.

We have a new blog site as you can see below and you can click on the link under the photo or follow the link in the sidebar. We get to go home with different folk and to do lots of different things and to go to places we've never seen before.

Where will we go next I wonder?

## THE ADVENTURES OF BRIX AND MORTA

FRIDAY, 14 MARCH 2008

Adventures with Green: Episode 5

ENTER

## About Me



Name:  
Brix & Morta  
Location:  
Sheffield, England

Well there's actually two of us...Brix (in blue) and my lovely colleague and new friend Morta (in brown). We are the 'CONSTRUCTION BUDDIES' for the new SHARROW PRIMARY SCHOOL. Our job is to keep you all posted about the design and construction of the new school, so we're keeping this journal of the people we meet and the things we see and we'll tell you what we learn. We hope you find it useful, interesting, and fun. Please remember to come back and check on progress every couple of weeks. See you soon XXX

# THE ADVENTURES OF BRIX AND MORTA

THURSDAY, 24 APRIL 2008

## Adventures with Phoenix: Episode 4



*Brix and Morta were swinging on the swings and then they came in and ate some fruit. They washed their hands with Scooby Doo handwash. I bought it from the shop. They didn't wash the apples.*

POSTED BY JACKIE MARSH AT 02:48 0 COMMENTS

## Adventures with Phoenix: Episode 3



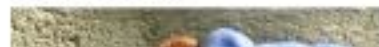
*Brix and Morta slept in my bed. I went to mummy's bed because I was shouting because they were noisy and I couldn't go to sleep.*

SHARROW

### ABOUT THIS BLOG

This blog has been created for pupils in the Foundation Stage at Sharrow Primary School, Sheffield, UK. Children take it in turns to take home Brix and Morta, two toys who kept everybody up to date with news when the new school was being built. Children take photographs of Brix and Morta having adventures in their homes and then they tell stories about the toys' adventures to appear on this blog. Write a comment letting the children know what you think of the adventures of Brix and Morta!

### BRIX AND MORTA





## Adventures with Patrick: Episode 2



*Brix and Morta went to the cafe after the beach. They had a chocolate milkshake. I had a hot chocolate milkshake because a hot chocolate milkshake is so creamy. I had a cheese toastie and I had an ice cream there. I went on Postman Pat after I had my ice*

*cream.*

POSTED BY JACKIE MARSH AT [02:20](#) 1 COMMENTS

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[Older Posts](#)

Subscribe to: [Posts \(Atom\)](#)



## "Adventures with Patrick: Episode 2"

1 Comment - [Show Original Post](#)



**anonymous said...**

I think that the cafe looks great and I expect Brix and Morta were very thirsty after having lots of fun on the beach. I have never had a hot chocolate milkshake but it sounds lovely. What is a Postman Pat ride ? Love from Aunty Cathy in London.

23 April 2008 14:37

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THURSDAY, 6 MARCH 2008

## Adentures with Zakariya: Episode 5



Zakariya was feeling poorly and so Brix and Morta helped him feel better.

*They made me better with the doctor toys. They listened to my heart.*

POSTED BY JACKIE MARSH AT [02:53](#) 9 COMMENTS

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**anonymous said...**

i am happy to see zakaria work.i am zakaria uncle  
Bangladesh

08 March 2008 01:42

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Have an account? [Sign in](#)

## Get short, timely messages from Giraffe Class.

Twitter is a rich source of instantly updated information. It's easy to stay updated on an incredibly wide variety of topics. [Join today](#) and [follow @GiraffeClass](#).

[Sign Up](#)

Get updates via SMS by texting [follow GiraffeClass](#) to [0198089488](#) in Australia  
[Codes for other countries](#)



## GiraffeClass

Tomorrow the [#newgiraffes](#) are coming to see their new classroom and meet their new teacher. Please say hello to them. Pls RT

about 12 hours ago via web

we have been doing different sports in our teams.

about 20 hours ago via web

Name: Giraffe Class

Bio: We are a Year 1 class!  
Come here everyday to find out what we have been doing!

12 following 224 followers 18 listed

Tweets 269

Favorites

Following



we hav been macin numburs and wurcin ☆  
on ar numbur lins to solv the problums.

11:59 AM Mar 31st via web

[Reply](#) [Retweet](#)



**GiraffeClass**

Giraffe Class

we are haveing a Ester colouring ☆  
compertioten we can win a toy.

10:29 AM Apr 1st via web

[Reply](#) [Retweet](#)



**GiraffeClass**

Giraffe Class



@markolver fank you for the #ff. Our teacher ses you are funny. Will you tell us sum of your jokes? If you do we will tell you ours.

12:06 PM Mar 29th via web in reply to markolver

Retweeted by you


Reply Retweeted (Undo)



GiraffeClass

Giraffe Class

Tweet sent to comedian to thank him for the *follow Friday* recommendation.

**@GiraffeClass** I would love to hear your jokes. What do you call a Donkey with 3 legs? A wonkey. 

12:16 PM Mar 29th via UberTwitter in reply to GiraffeClass

 [Reply](#)  [Retweet](#)



**markolver**

Mark Olver

@markolver Thank you for your joke. It made us laf. Wair do cows go on a sataday night? to the moooooooooooooovies! ☆

1:21 PM Mar 29th via web in reply to markolver

↩ Reply ↻ Retweet



GiraffeClass

Giraffe Class

A group of children were given the task of thinking of a joke which could be sent back to Mark Oliver.

@GiraffeClass That was a good joke  
Giraffes. Can you think of anymore cow  
or animal jokes?

1:43 PM Mar 29th via UberTwitter in reply to GiraffeClass

✎ Reply 13 Retweet



markolver

Mark Olver



@markolver why did the chikin cros the road? Becos sumbody left the boot open! ☆

2:54 PM Mar 29th via web in reply to markolver

Reply Retweet



GiraffeClass

Giraffe Class

The challenge from Mark Oliver led to the children moving to the writing table to think of jokes to send back. There were even complaints that there weren't sufficient places at the writing table!



[Home](#) [Profile](#) [Find People](#) [Settings](#) [Help](#) [Sign out](#)

We are looking at riddles this week.  
Please tweet us your favourite riddle as  
long as it is suitable for Giraffes to read!  
Please RT.

10:30 AM Mar 28th via web

Retweeted by you and 2 others

[Reply](#) [Retweeted \(Undo\)](#)



**GiraffeClass**

Giraffe Class

Original call put out on Twitter by class teacher.

@GiraffeClass What gets wet whilst drying? ☆

10:57 AM Mar 28th via Gravity

↩ Reply ↪ Retweet



mr\_chadwick

Mr. Chadwick

Riddle sent by teacher and response sent during Literacy lesson.

@mr\_chadwick Is it a towul? ☆

10:05 AM Mar 29th via web in reply to mr\_chadwick

↩ Reply ↪ Retweet



GiraffeClass

Giraffe Class

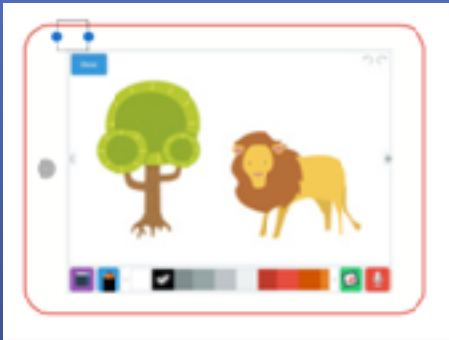
# Blogs and Twitter

- Provide opportunities for children to engage in multimodal communication
- Offer authentic opportunities for writing to a 'real-world' audience
- Provide opportunities for involving parents and families



# Creating stories and films

My Story



Sock Puppets



Imagination  
and creativity

Storytelling

Oral skills

Toontastic



Puppet Pals



— THE —  
STORY  
TIME  
FAMILY

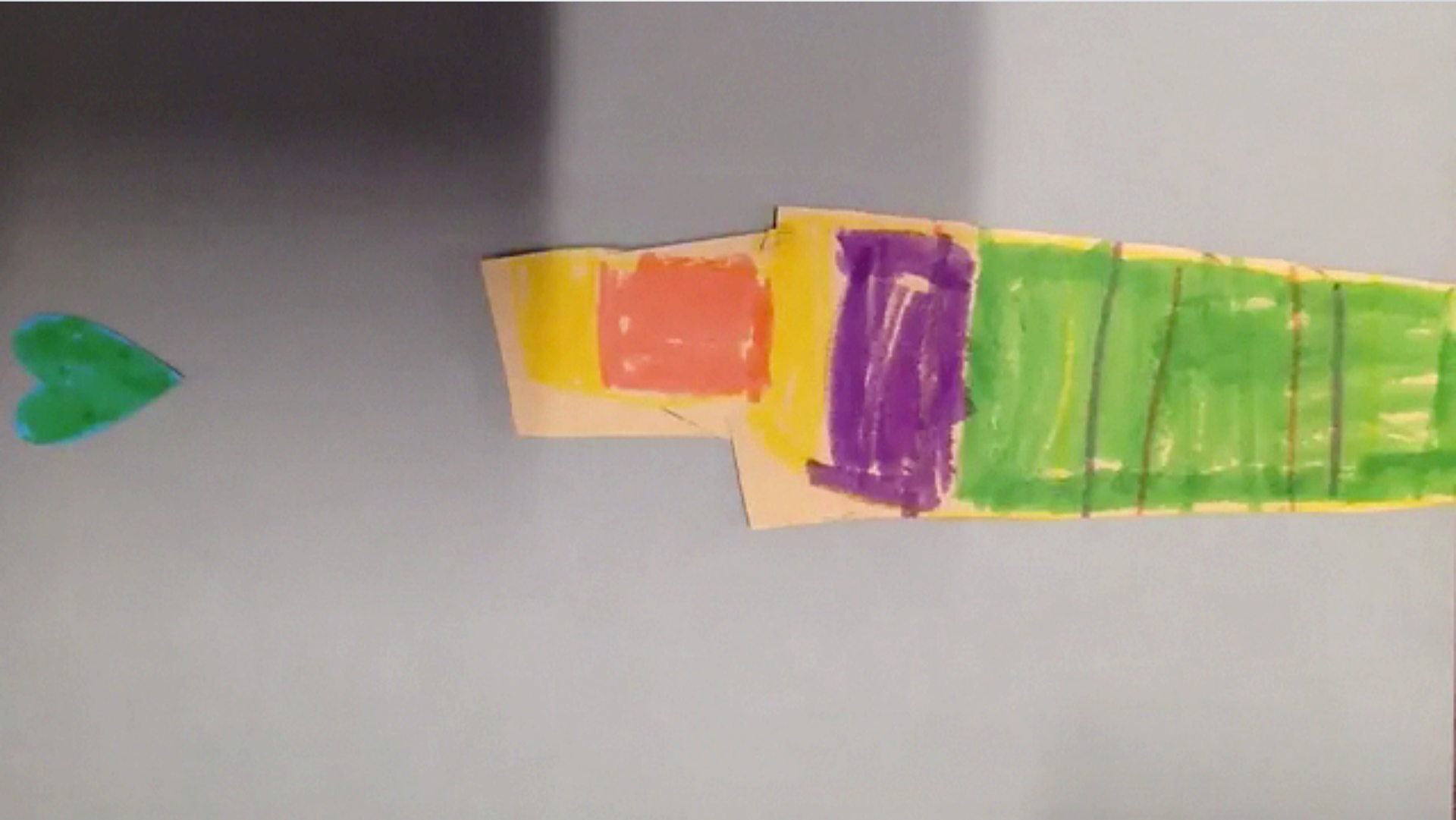
OLIVER JEFFERS

READ ALOUD





iStopMotion





# STORY APPS





# My Story

Done



Book Puppets

# Online/ Offline

# QR Codes







**Montenev Reception** @MontenevFS2 · Jun 28

It's our exhibition tomorrow afternoon @ 2:30pm. Don't forget to bring your phone. A 'QR reader' may be needed!!!!



2



3



# QR Codes







# Augmented Reality Apps





# Quiver App





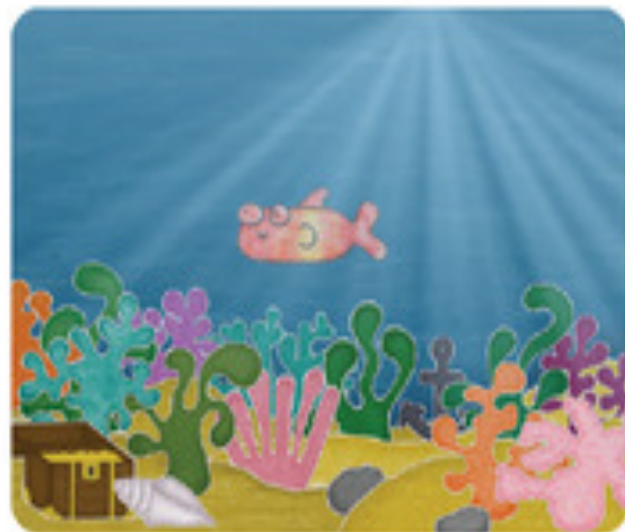


# Colouring Magic

Music : Klaviersonate Nr. 8 c-Moll  
by Beethoven; Classical Music Sound Library



squiggly  
fish



# Aurasma



Look out for the logo below on displays around the classroom. Use your phone/ tablet to see the video behind the picture!

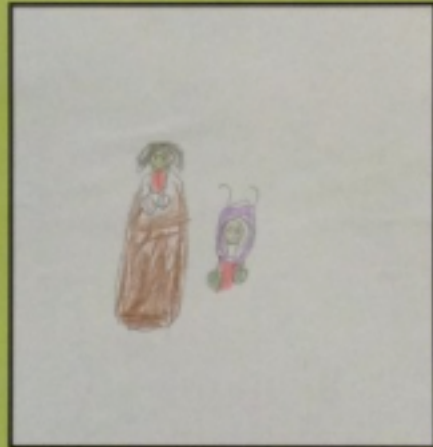
# \*Augmented Reality

If you see this sign then  
use the Aurasma App  
on your tablet to find out more.





sooper Sophie is in  
the garden.



a pham is talking  
dagnah nll.



sooper Sophie stops  
the pham and saves  
the baybel.

Sophie J





## HP Reveal 4+

Formerly Aurasma

Aurasma

★★★★☆ 3.5, 348 Ratings

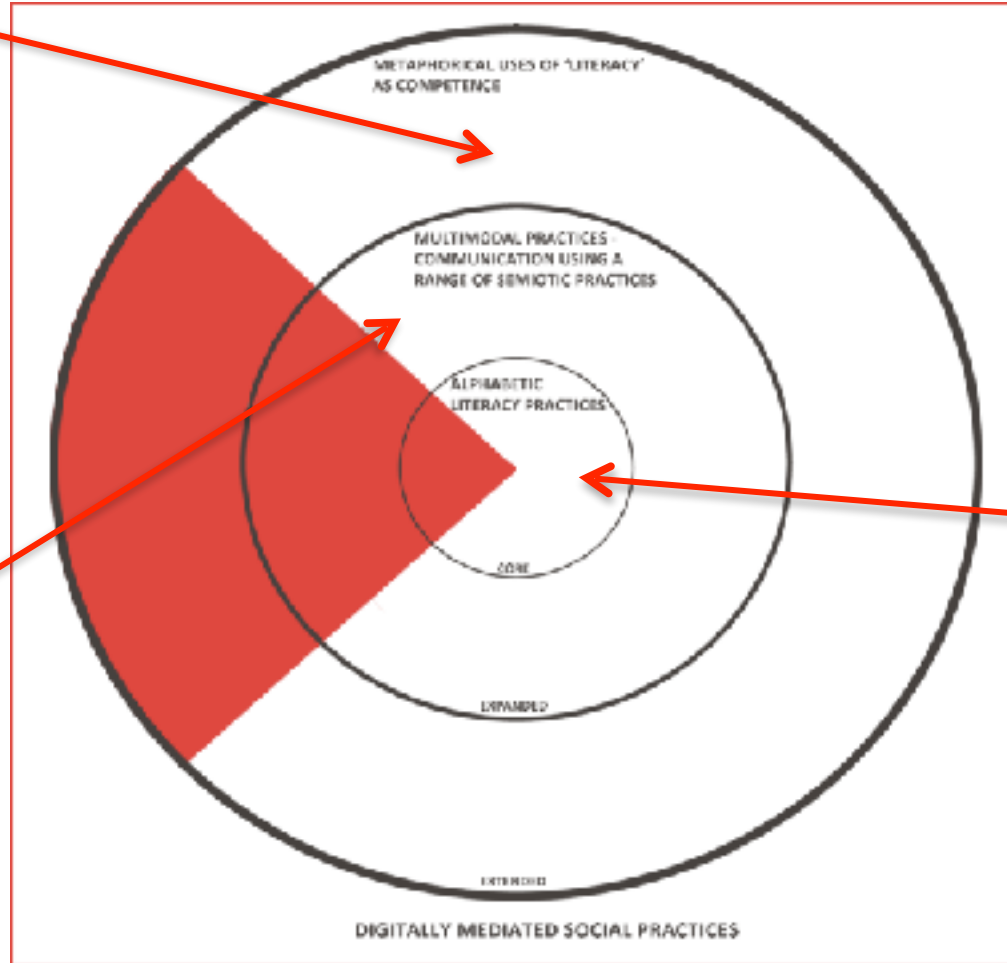
Free

## Information/ digital literacy

- Choosing and applying information
- Technical skills related to operating technologies

## Multimodal design

- Learning about the affordances of modes
- Choosing modes to suit the purpose
- Understanding audience



## Alphabetic literacy practices

- Phoneme-grapheme correspondence
- Writing simple sentences
- Understanding narrative structure
- Comprehending and responding to stories

# Conclusion

- Literacy in the 21<sup>st</sup> century is much more than alphabetic print, but alphabetic print still key to communicative practices.
- Multimodality is not oppositional to traditional literacy - children can learn to decode and encode alphabetic print at the same time as authoring and reading multimodal texts.
- We need to develop an understanding of how to assess children's multimodal learning - just focusing on assessing print literacy is too confining for the digital age.
- Not to undertake this work risks exacerbating digital exclusion.