



**IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16–19 OCTOBER**



**INFUSING TECHNOLOGY FOR EARLY YEARS LITERACY SUPPORT:
USING THE LEARNING TOOLKIT TO SUPPORT LEARNING IN THE PYP AND
BEYOND**

GIOKO, A. & MARSH, J.





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Guiding Questions



- What is the LTK?
- Why and how we have used ABRA to good effect in local schools?
- Why and how we are trialling LTK in the Academy and our plans for further role out?
- How E-Pearl links to ABRA, and how we are using it to support MYP Design, PP and DP portfolios?



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014



22/01/15 11:28

FAQ



[logout](#)



Click on the application you would like to use



My Account



ABRACADABRA



• READS

www.abralite.ca



ABRACADABRA

**A Balanced Reading Approach
for Children All Designed to
Achieve Best Results for All**

Questionable Assumptions:

Reading and writing are
essential skills for children to
achieve success

A Child should therefore be able
to read by grade three

Early intervention is important in
a systematic and explicit
instruction of literacy skills





ABRA....

- is a free interactive web based literacy resource
- has a flat, fun and friendly interface
- targets both comprehension and skill acquisition
- has been shown to have significant beneficial effects





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

ABRA consists of 5 modules

- Instructional
- Professional development
- Assessment
- Communication
- Parents



Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28



- Non linear → Situated within 17 digital stories
- Engages learner interest through cartoons
- Targets a range of abilities in four domains
 - Alphabetics,
 - Fluency,
 - Comprehension
 - Writing

Gioko and Marsh (2014)



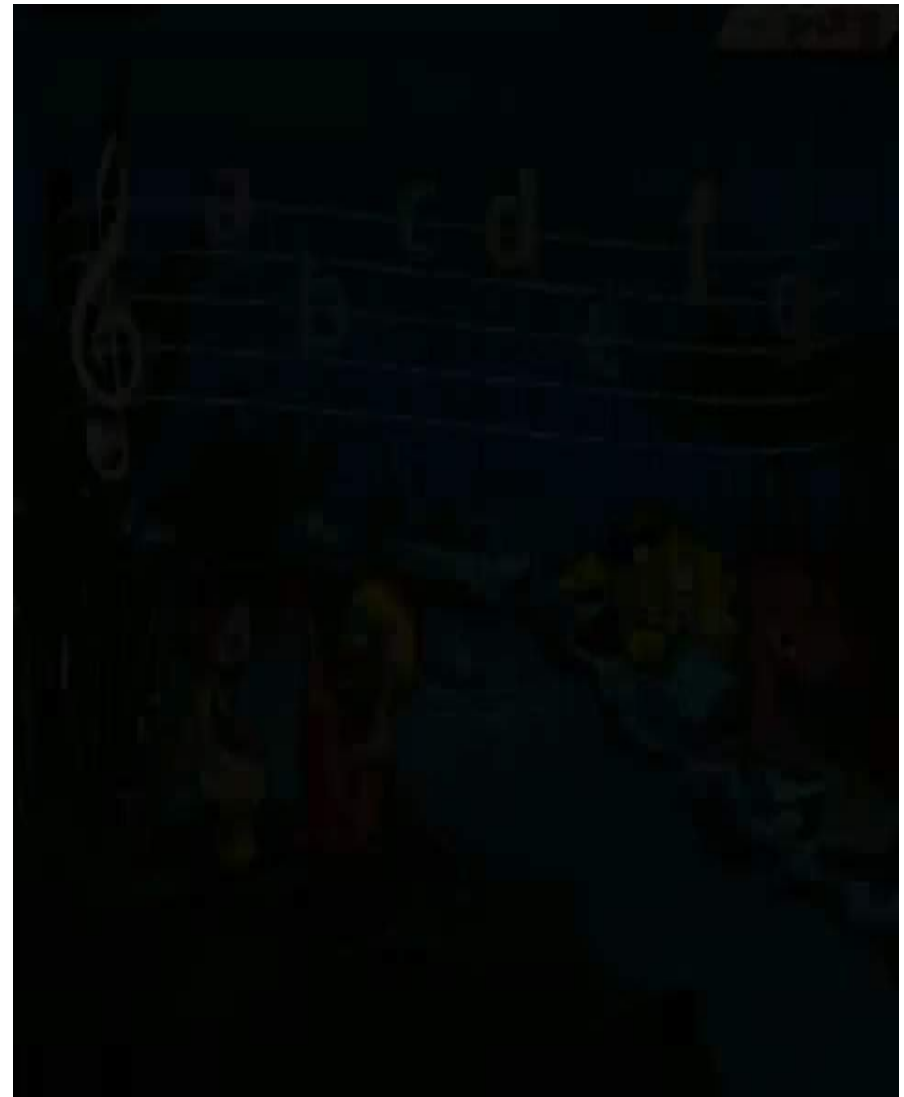
Alphabetic

Foundation

- alphabets
- letter sound correspondence
- auditory discrimination
- syllable counting

Engagement promotes

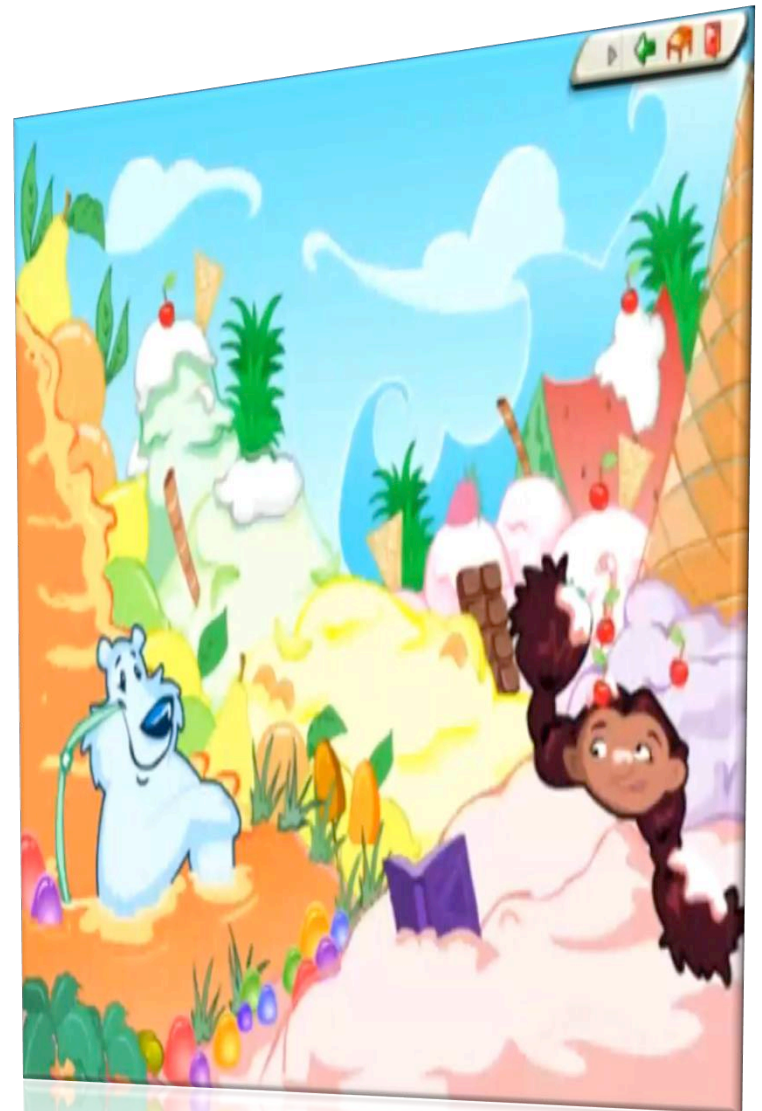
- reading fluently
- few mistakes
- good pace and cadence.
- correct expression

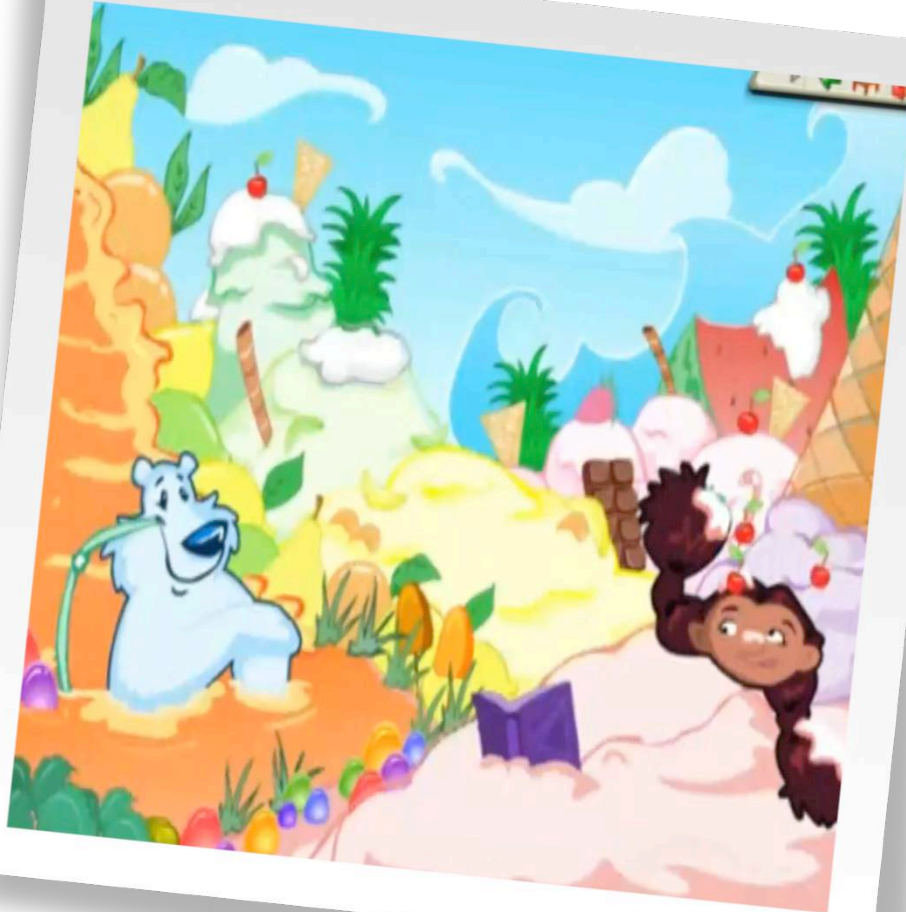




Reading and writing,

- Spelling activities,
- Sentence construction,
- Punctuation marks,
- Capitalization,
- Paragraphing,





Comprehension

Students begin with putting the text together or recalling the elements of the story



E-Pearl

Goal setting

Activity

- Planning
- Doing
- Reflection

Sharing

- Feedback
- Presentation
- Feedback



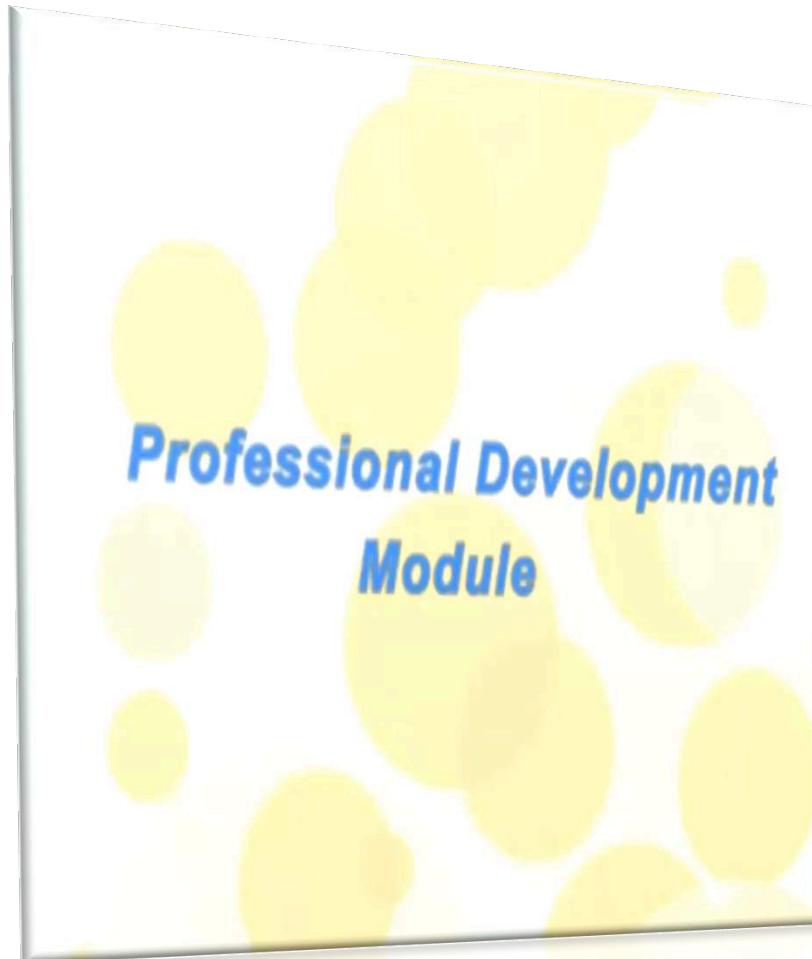
Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28



Continuous Professional Learning

- Activities
- Videos
- Tracking Students
- Communities of practice

Gioko and Marsh (2014)



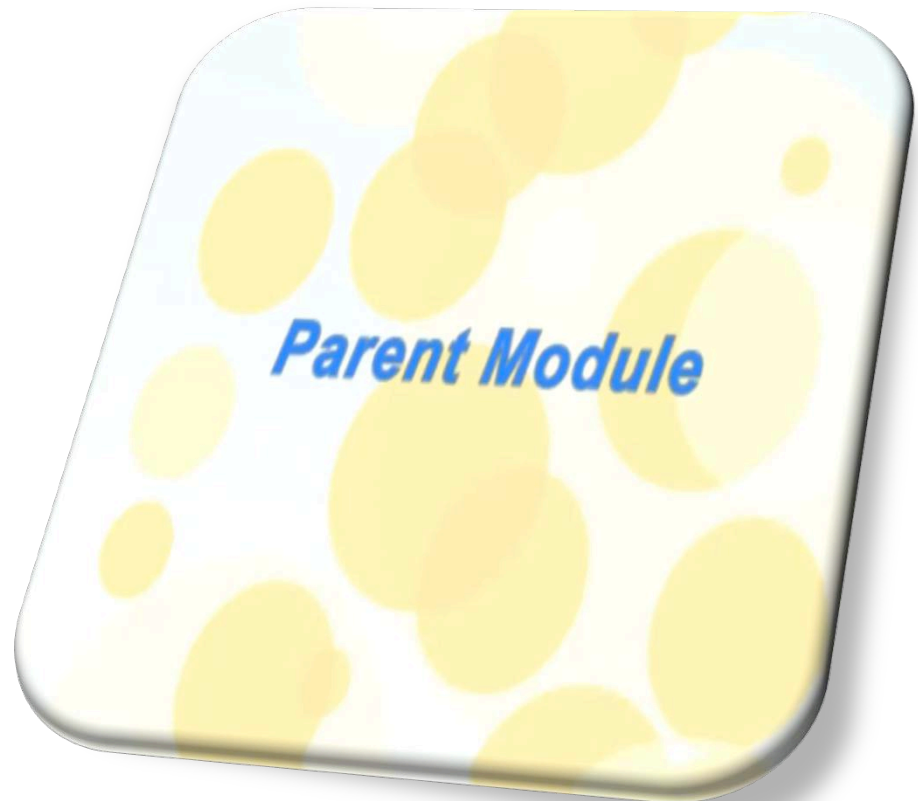
IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Parent's Module

Provides tips on how literacy may be supported and further developed through home use.



Gioko and Marsh (2014)

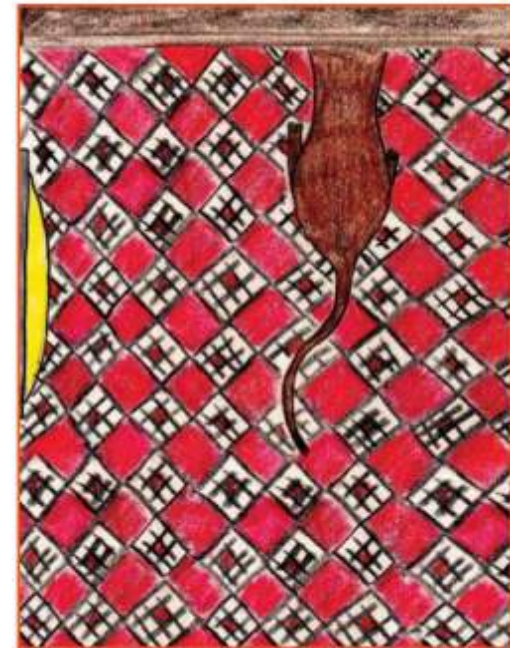


Whiskers jumped up to explore.
Pale yellow light made purple
shadows on the floor. The house
was quiet.

2

He ran down a long, lighted hallway.
This house was fine for a hungry
mouse. *This was a house for a mouse.*

With his pink nose to the carpet,
Whiskers smelled something
wonderful. He squeezed under a
dark door at the end of the long hall.



3



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

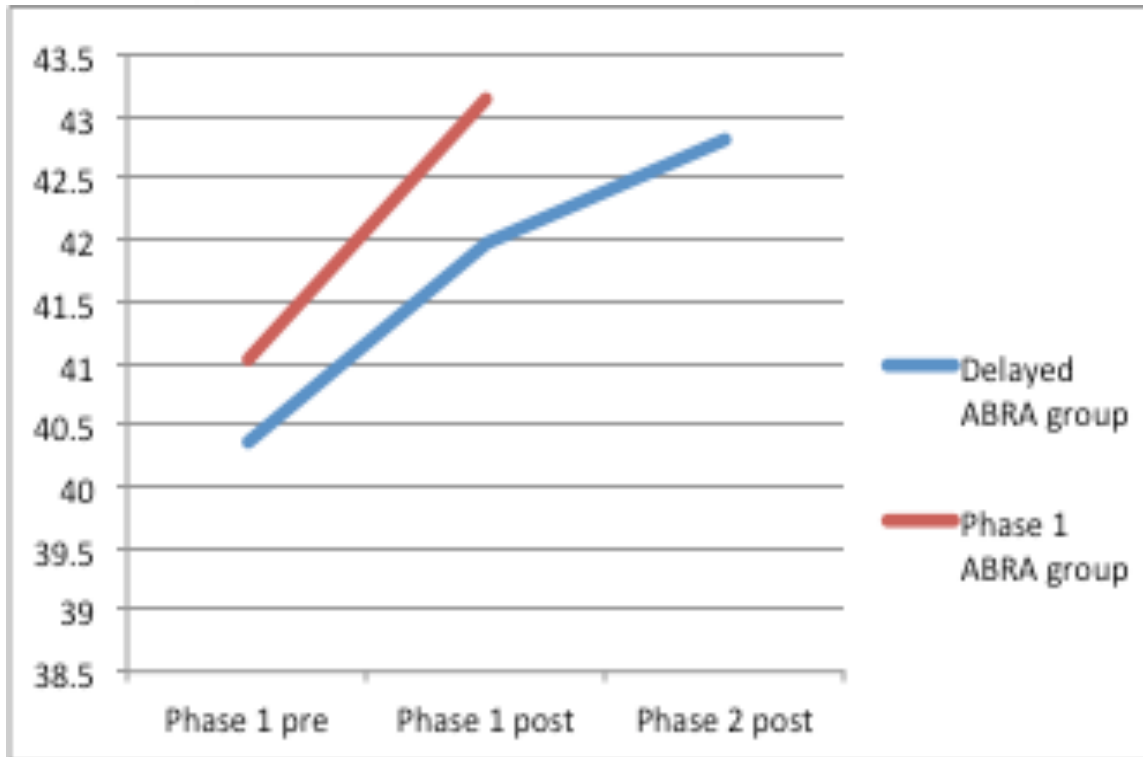
Collaborative Planning



Gioko and Marsh (2014)



The Results..... Vocabulary



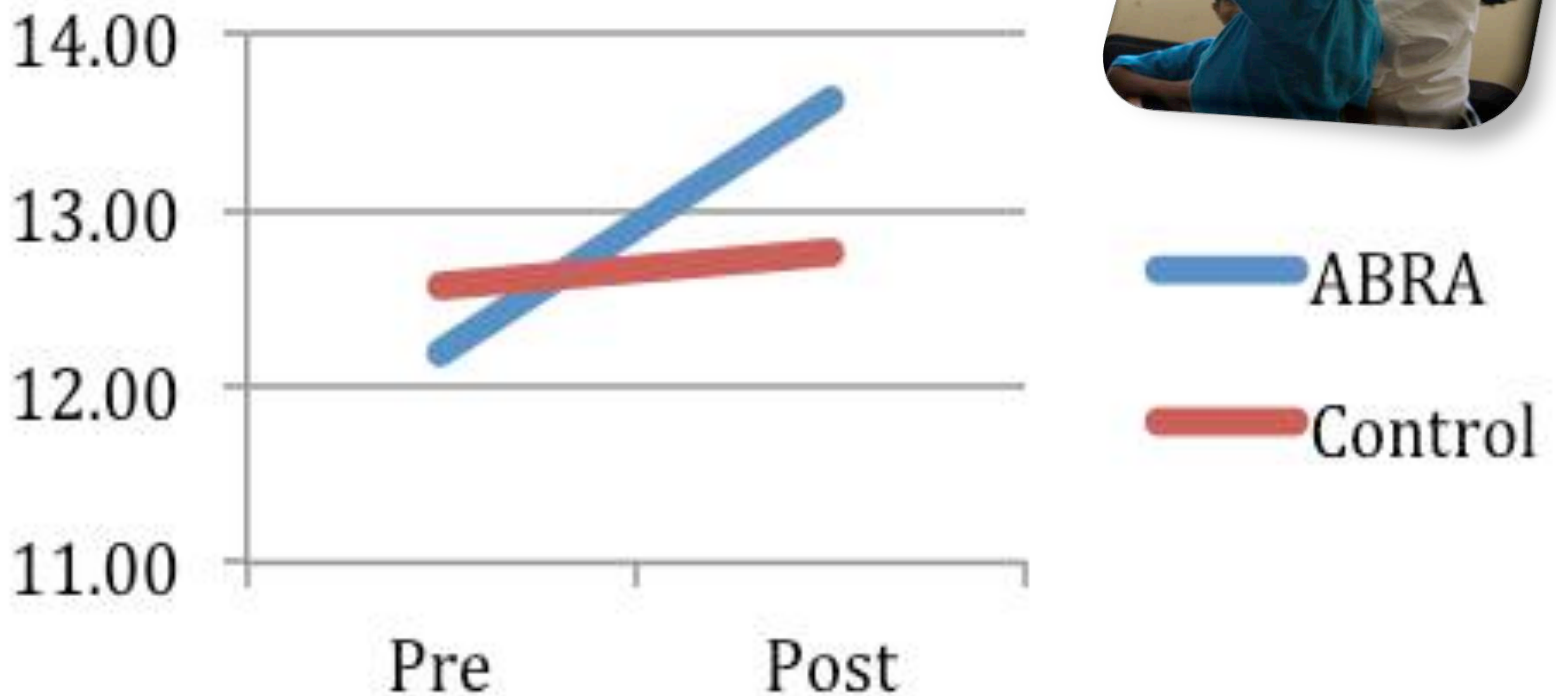


IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

The Results..... Listening



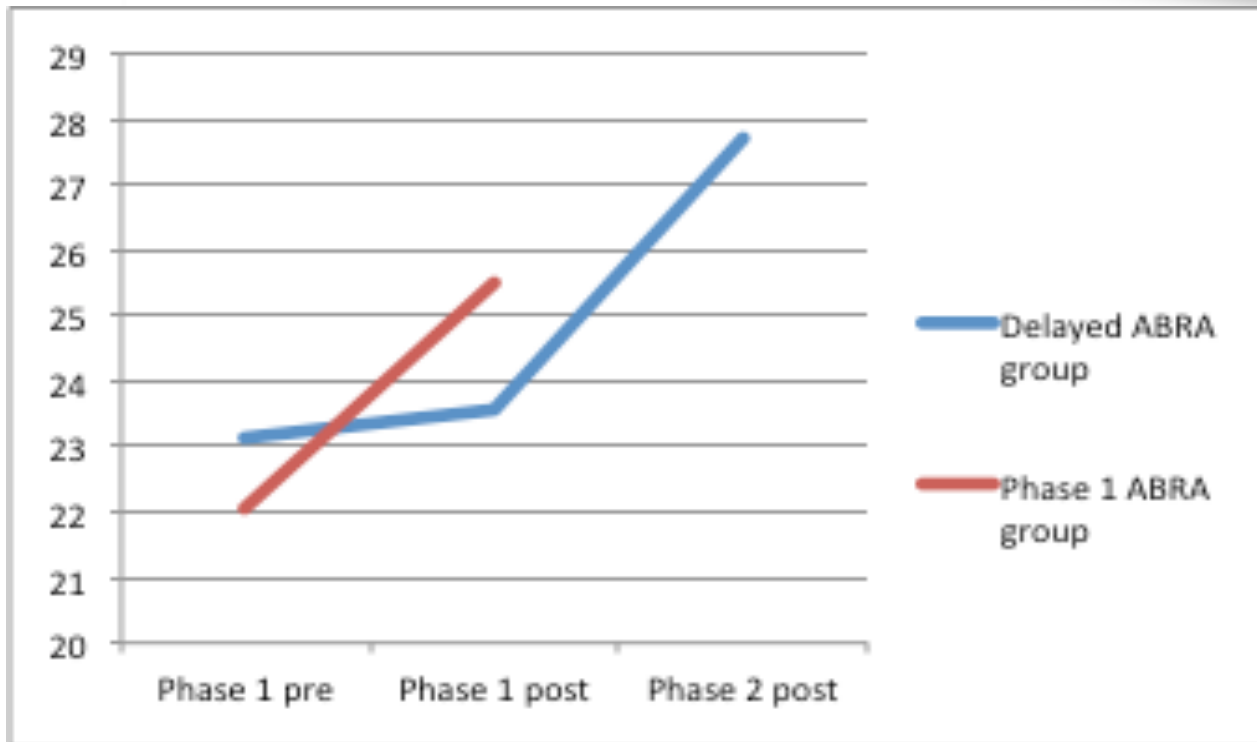


IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

The Results..... Comprehension



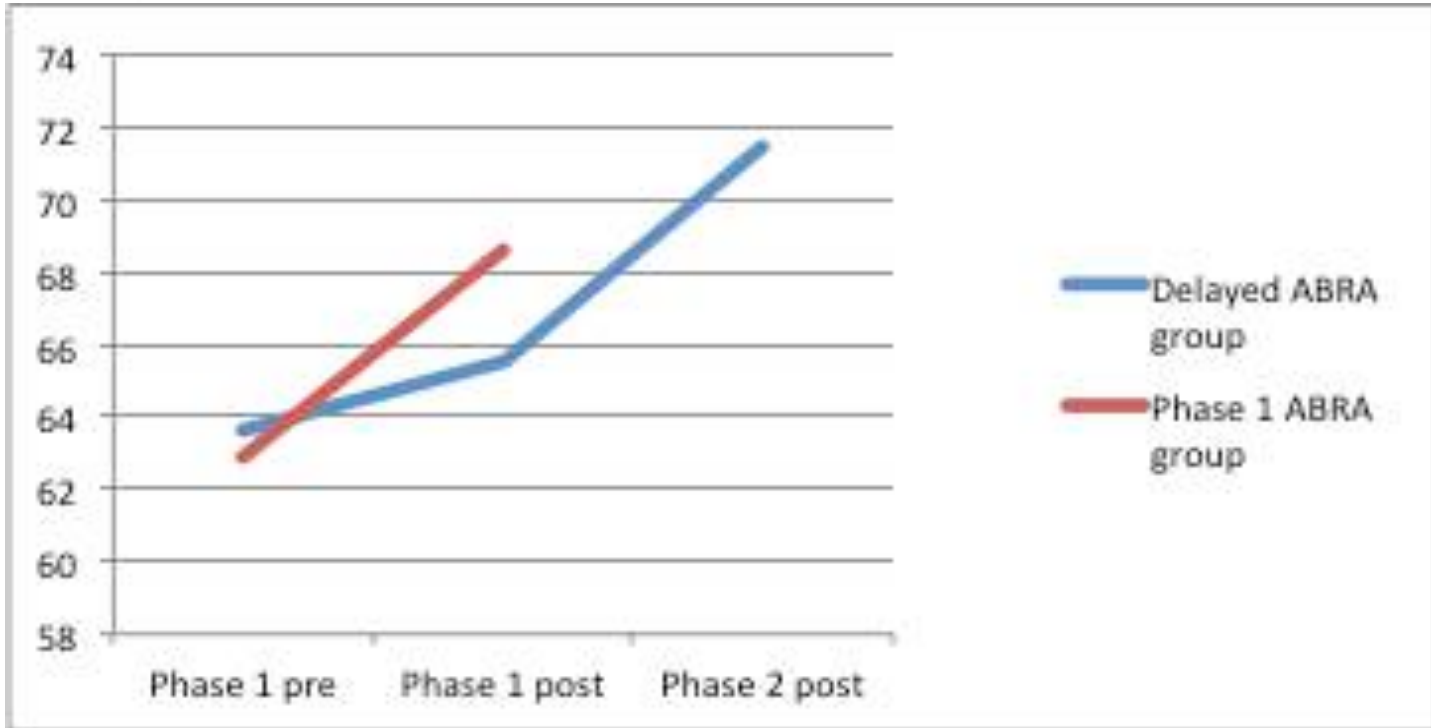
Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



The Results..... Composite



Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



Core exams results for ABRA and control classes

Core subject exams	ABRA Means ¹ (N= 168)	Control Means ¹ (N=173)	Effect Size ²
English	80.32 (80.39)	76.73 (76.65)	0.29
Standard Deviation/Error	16.37 (0.99)	20.71 (0.98)	
Mathematics	68.10(68.15)	65.82 (65.74)	0.15
Standard Deviation/Error	19.57 (1.29)	21.16 (1.27)	
Science	77.68 (77.74)	74.71 (74.65)	0.17
Standard Deviation/Error	19.09 (1.37)	21.74 (1.35)	
Social Studies	72.91 (72.99)	71.06 (71.01)	0.10
Standard Deviation/Error	22.67 (1.52)	22.12 (1.49)	

Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Successes

- Teachers comfort levels of using technology
- Attitude shift
- Greater focus on Alphabetic, Fluency, Comprehension and Writing
- Innovative use of iBook
- Students ICT skills
 - Cultural awareness
 - Parental involvement





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Infusing LTK into the PYP

- All the PYP teachers trained
- Year 1 and 2 allocated slot in the computer lab dedicated for Learning Toolkit use
- Each class provided with an ibook loaded with the software for
 - whole class instruction,
 - small group
 - individual use
 - planning.

Gioko and Marsh (2014)





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

ABRA @PYP

- Inquiry** – the ‘*secret room*’ triggers language curiosity
- Teaching and learning** – Across all essential components
- Making language connections** – Across units of inquiry.
- Sharing of lessons and materials** – adaptable sample lesson plans and assessment tools and tasks.
- Learner profile and attitudes** – targeted stories
- Multiple intelligence** – multi-sensory interaction.
- International-minded** – Mix of culture references
- Transdisciplinary skills** - enhanced through cooperative learning and topical Stories.

Gioko and Marsh (2014)





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

PYP Themes – making connections

Who we are – different characters

Where we are in place and time – from different places

How we express ourselves – different forms of expression
– appreciating diversity

How the world works – New ways of learning

How we organize ourselves – Story characters and
students working together – each doing different job

Sharing the planet – Mixed cultural representation





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Parissa's Portfolio

close window



epearl

Home Artifacts Files

File Cabinet

File Name

All Files

My Files

Files Shared With Me

Links

File Type

- Audio
- Image
- Video
- Document
- Other



Interview with the teacher.docx

File Type: docx
File Size: 6.596 KB
Date Created: 2014-05-04 09:58:24



Justification and Improvements.docx

File Type: docx
File Size: 1.542 KB
Date Created: 2014-05-07 09:25:34



measuring design 1.docx

File Type: docx
File Size: 2.803 KB
Date Created: 2014-05-07 09:24:49



MEASURING DESIGN 2.docx

File Type: docx
File Size: 9.688 KB
Date Created: 2014-05-07 09:25:05



Measuring design 3.docx

File Type: docx
File Size: 9.225 KB
Date Created: 2014-05-07 09:25:17



PLAN STAGE REFLECTION.docx

File Type: docx
File Size: 1.43 KB
Date Created: 2014-05-25 06:40:23



planning for investigate.docx

File Type: docx
File Size: 7.262 KB
Date Created: 2014-05-04 09:57:56



REFLECTION FOR INVESTIGATE.docx

File Type: docx
File Size: 1.56 KB
Date Created: 2014-05-18 07:19:37

Gioko and Marsh (2014)

ePEARL
@MYP
Design





IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Fiona's Portfolio

Français | FAQ | My Account | Logout



ePEARL
@MYP
PP



Home Artifacts Files **Share** Overview Personalize

Parent Mode

Shared With Me

Unshare

My Shares [?]

Title	Shared With	Shared on
 My Entire Portfolio	 Class: Personal Project	2014-09-09 12:47:13
+ Share		



Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER





22/01/15 11:28

ePEARL @ DP CAS



Karishma's Portfolio FAQ | My Account | Logout



Home Artifacts Files Share Overview Personalize





Tags Save New Version

Planning Doing **Reflecting**

Reflecting

Title: 28th Annual Extempore Competition CAS Reflection

One Stop Reflection ⓘ [Scaffolded Reflection](#)

Click on "Add Questions" for a list of statements that will help you reflect. [Add Questions](#)

I changed my plan if I felt it was not working.	never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	always	X
How hard I worked is related to how well I did.	never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	always	X
I was interested in what I was doing.	never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	always	X
I checked how well I was doing against the plan I made.	never	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	always	X

One Stop Reflection
Scaffolded Reflection
Cause
Lessons Learned
Satisfaction

Tags

Increased awareness of strengths and areas of growth

Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

ePEARL @ DP WSEE



Anthony's [Portfolio](#) Français | [Logout](#)

Main Menu Schools Classes Teachers **Students**

List of Students Link / Unlink Import Students

- To edit [student](#) click [pencil](#) icon next to the student's name.
- To limit your view select [school](#) and/or class.
- To link student to [classes](#) click the Link/Unlink tab.
- To [create new student](#) click the Create/Delete tab.

Aga Khan Academy World Studies Supervisees Create

+ Filters

4 records

	Name: First Last	Nickname	Username	Password	ePEARL	Date Added	
	Adamji, Zainab		873	0246	level2	04/03/14	<input type="checkbox"/>
	Chemelil, Elsie		870	1491	level3	04/03/14	<input type="checkbox"/>
	Janmohamed, Imran		871	2728	level2	04/03/14	<input type="checkbox"/>
	Valli, Tahshin		872	6383	level2	04/03/14	<input type="checkbox"/>

4 records

Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Contacts

Online access

<https://abralite.com>

LTK Team @ Concordia University, Centre for the Study of Learning and Performance

Dr. Philip Abrami (abrami@education.concordia.ca)

Ms. Anne Wade (wada@education.concordia.ca)

LTK Team @ Aga Khan Academies

Mr. Gioko Maina (gioko@akam.ac.ke)

Mr. Jonathon Marsh (jonathon.marsh@akdn.org)

Gioko and Marsh (2014)



IB AFRIQUE | FORMAS DE CONVIVÊNCIA
IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28

Thank you





IB AFERICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



22/01/15 11:28



Gioko and Marsh (2014)



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



Gioko and Marsh (2014)



IB AFRIQUE, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



GRADE scales	ABRA boys (N=73)	Control boys (N=68)	Mean difference	F value and significance
Word Reading (WR)	1.67	2.10	-0.43	0.62
Standard Deviation	3.26	3.18		
Word Meaning (WM)	0.75	0.13	0.62	0.57
Standard Deviation	4.98	4.72		
Vocabulary Composite (WR+WM)	2.42	2.23	0.19	0.03
Standard Deviation	6.46	6.38		
Sentence comprehension (SC)	0.60	-0.63	1.23	4.78*
Standard Deviation	3.54	3.13		
Passage comprehension (PC)	2.53	-0.38	2.91	17.99***
Standard Deviation	4.23	3.90		
Reading Comprehension Composite (SC+PC)	3.13	-1.06	4.19	17.40***
Standard Deviation	6.75	4.98		
Total (VC+RC)	5.56	1.22	4.34	6.78**
Standard Deviation	10.44	9.26		
Listening	1.55	0.04	1.51	9.34***
Standard Deviation	2.83	3.01		

*** $p < 0.00$, ** $p < 0.01$, * $p < 0.05$

Gioko and Marsh (2014)





GRADE scales	ABRA girls (N=107)	Control Girls (N=106)	Mean difference	F value and significance
Word Reading (WR)	1.15	1.47	-0.32	0.49
Standard Deviation	3.03	3.58		
Word Meaning (WM)	0.69	0.64	0.05	0.01
Standard Deviation	4.74	3.45		
Vocabulary Composite (WR+WM)	1.85	2.11	-0.26	0.11
Standard Deviation	6.02	5.50		
Sentence comprehension (SC)	0.36	-0.00	0.36	0.34
Standard Deviation	4.40	4.79		
Passage comprehension (PC)	1.85	0.95	0.9	1.86
Standard Deviation	4.53	5.11		
Reading Comprehension Composite (SC+PC)	2.22	0.97	1.25	1.42
Standard Deviation	7.11	8.18		
Total (VC+RC)	4.07	3.08	0.99	0.52
Standard Deviation	9.69	10.26		
Listening	1.95	0.21	1.74	20.06***
Standard Deviation	2.55	3.06		



IB AFRICA, EUROPE & MIDDLE EAST
REGIONAL CONFERENCE 2014
ROME • 16-19 OCTOBER



Reading gains for low and high readers at the pre-test in ABRA and control classes

GRADE scales	ABRA mean gains (N= 118)			Control mean gains (N=119)			Difference in gains between low and high readers in ABRA and control groups	F value and significance
	Low (N=58)	High (N=61)	Difference	Low (N=57)	High (N=61)	Difference		
Word Reading (WR)	3.22	0.28	2.94	3.64	0.26	3.38	-0.44	0.26
Standard Deviation	3.99	2.31		3.87	2.75			
Word Meaning (WM)	3.34	- 0.65	3.99	2.15	-1.08	3.23	0.76	0.38
Standard Deviation	7.01	2.38		4.72	3.69			
Vocabulary Composite (WR+WM)	6.57	-0.36	6.93	5.80	-0.82	6.62	0.31	0.04
Standard Deviation	7.95	3.80		6.94	4.40			
Sentence comprehension (SC)	0.52	-0.48	1	0.59	-1.09	1.68	-0.68	0.48
Standard Deviation	4.30	3.51		3.90	3.38			
Passage comprehension (PC)	1.57	1.65	-0.08	-0.11	0.14	-0.25	0.17	0.03
Standard Deviation	4.95	3.97		3.69	4.75			
Reading Comprehension Composite (SC+PC)	2.10	1.17	0.93	0.52	-0.94	1.46	-0.53	0.10
Standard Deviation	7.95	5.98		5.96	6.37			
Total (VC+RC)	8.67	0.80	7.87	6.39	-1.76	8.15	-0.28	0.01
Standard Deviation	12.29	7.57		9.81	9.39			
Listening	2.09	1.55	0.54	0.12	0.09	0.03	0.51	0.43
Standard Deviation	3.46	1.84		3.68	2.49			