



Overview



**Learning Gains
through Play**



**Learner-centred leading to
learner-driven**



**Accelerated by
innovative
technologies**

The Overall Aims...



To Improve a range
of Foundational
Literacies

To promote
learning through
Play

To give teachers
new tools and a new
zest for teaching

To relate cognitive
development and
motor coordination

Targeted Literacies

Visual Literacy

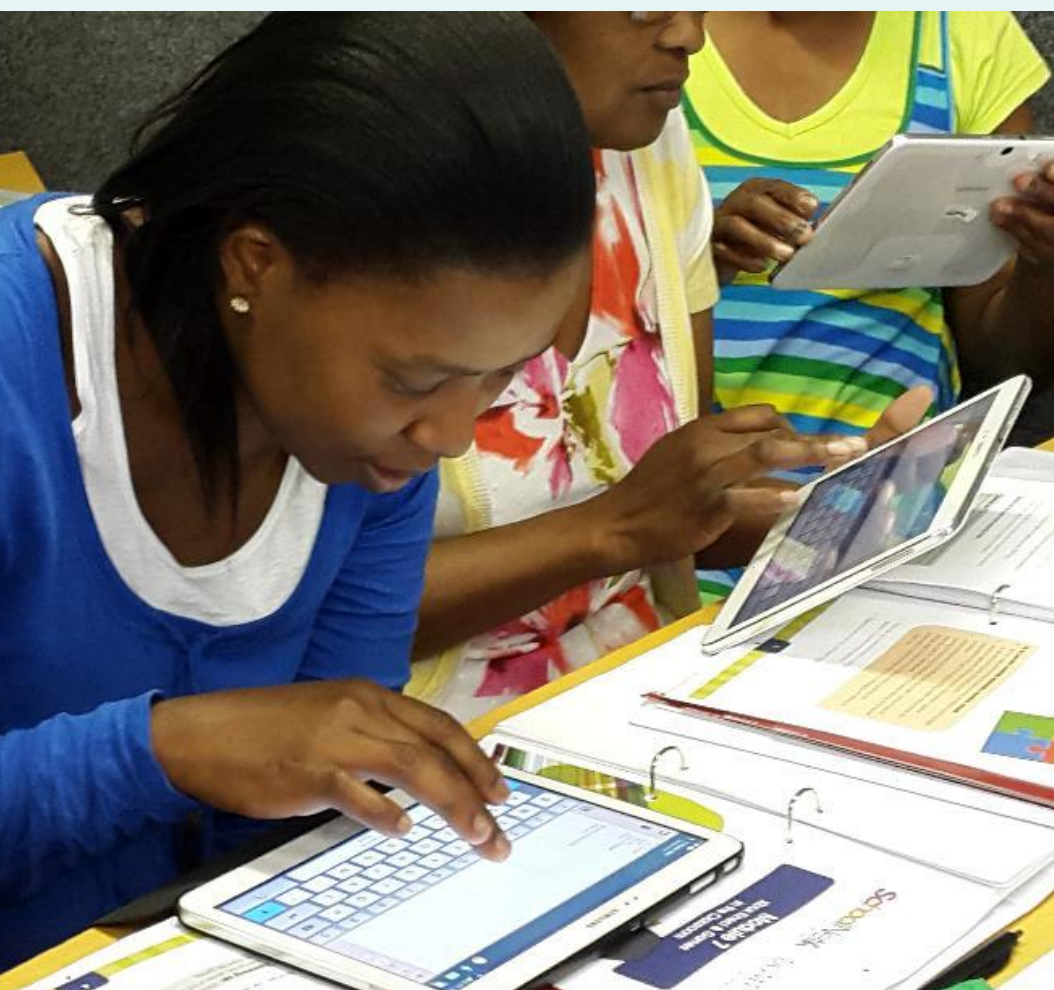
Acquisition of English

Fine and Gross Motor Skills

Numeracy

Emotional Literacy





The D G Murray Trust

Samsung donated large TVs

Microsoft donated 10 Xboxes

Intel assisted to source learner tablets

CSIR – authorised use of materials

For those unfamiliar with Xbox Kinect

A gaming console TV screen and sensor

Using Body and Voice

Variety of Games
Adventure-Sports
Dance -Imagination

Learner Engagement with games but also with peers

Learners inadvertently overcome inhibitions

X-box Learning gains

Video of Adele Driesen explaining how an Xbox Kinect could overcome learning difficulties (Lerato in the photo)

<https://www.youtube.com/watch?v=dcQ87i8QRdM>



Our Research

- In South Africa “learners who speak English as a second-language clearly perform worse on average than their first-language English counterparts”
- Seven of the ten project schools use mother tongue for instruction through Foundation Phase and then switch to English LoLT in Grade 4
- One of the components of the research is to measure any **acquisition of English oral language** that develops as a result of interacting with apps and games.



Teacher Professional Development

Components	Delivery	Target Group	Days
1. Teacher Professional Development with tablets (ICT4RED course)	Clustered training at central venues by SchoolNet SA facilitators	23 KZN and 30 WC grade R & 1 teachers	10 modules spread out to accommodate implementation
2. Change Leadership course	Clustered training at central venues by SchoolNet SA facilitators	School Management Teams	7 modules , 1 per term
3. Evaluation	Rubricate – external evaluator	10 project schools & 2 control schools	Annually
4. Support & Mentoring	SchoolNet SA	Project teachers and School Management Teams	Once per term

What has been achieved so far?

Teachers becoming familiar with their tablets..



Teacher Professional Development Outcomes



- Teachers appreciate the potential of play for learning
- Teachers shift pedagogy to use more play-based, learner-centred, and individualised approaches
- Communities of practice emerge, as teachers within and between schools support one another to implement new methods.

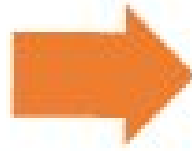
Learner-driven activities



- Video of Buselaphi Shelembe
- Explaining how learners find their own apps without being prompted to do so – and letting them do that without scolding them.
- <https://youtu.be/LV2z2RGlyZ0>

Testing

Baseline Testing
June - Sept 2014



- Grade R and 1 learners at the 10 schools and 2 control schools

Follow-up Testing
June - Sept 2015



- Grade R (new) and Grade 1 (last year's grade Rs)

Final Testing
2016

- Grade 1 (previous year's grade R) and Grade 2 (previous year Grade 1)

TASK 3 – Listening & Speaking

Evaluator-facilitated Task Guide and Score-card

1. Introduction:

Hello, I am _____ (shake hands) What is your name? Response _____

How old are you _____? (Prompt: how many years?) Response _____

I'm going to talk in English. I would like you to talk in English too.

What languages do you speak and understand? (Prompt: me English, you?) Response _____

LISTENING Skills – Engagement & Attentiveness

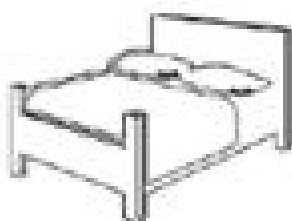
- 0 = no engagement
- 1 = sporadic engagement
- 2 = simple engagement
- 3 = full engagement (eye-contact, focus, connected)

SPEAKING Skills – Vocabulary & Language Use

- 0 = no verbal response or single name only
- 1 = monosyllabic/simple verbal responses to more
- 2 = simple phrase responses (e.g. I'm...; x years old)
- 3 = sentence responses/ volunteers more verbally

2. Identification Card Questions:

What is this a picture of?



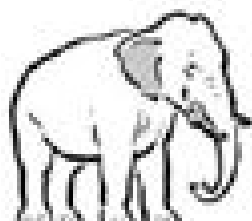
Response? _____

What is this a picture of?



Response? _____

What is this a picture of?



Response? _____

3. Action Identification Questions:

What am I doing?
(Perform action of clapping hands together to make a sound)

Expected Response Guide:
No verbal response = (0)
Non-English verbal response = (1)
English = single noun base = hands (2)
English = single simple verb base = clap (2)
English = single present participle = clapping (2)
English multiple correct words = clap hands (3)

What am I doing?
(Perform action of touching head with finger tips of right hand and remove)

Expected Response Guide:
No verbal response = (0)
Non-English verbal response = (1)
English = verb only = touch (var. hit) (2)
English = noun only = head (var. hand) (2)
English = multiple correct words = touch head (var.) (3)
English = multiple correct words = you touch your head (var.) (3)
English = present participle = noun = you're touching your head (var.) (3)

What am I doing?
(Perform action of winking = closing and opening one eye)

Expected Response Guide:
No verbal response = (0)
Non-English verbal response = (1)
English = noun only = eye/s (2)
English = verb only = wink (var. blink) (2)
English = multiple correct words = close eye (var.) (3)
English = multiple correct words = you're winking/ you're closing your eye (3)

- SPEAKING Skills – Vocabulary & Language Use**
- 0 = no verbal responses at all
 - 1 = all verbal responses incorrect/ not recognizable/ not in English
 - 2 = most (2/3 out of 3) responses correct in English but singular words (verbs OR nouns but not both)
 - 3 = most responses correct in English but at least one multiple word phrase (verbs + nouns)
 - 4 = all three responses correct in clear English using sentences with nouns and verbs and correct grammar

4. Carrying Out Verbal Instructions: (no demonstration provided)

Please will you ...
... clap your hands together (pause for understanding) ... two times.

Expected Response Guide:
Listen for instruction – eye-contact and concentration
Follow instruction = enactment and precision

- LISTENING Skills – Focus & Reaction**
- 0 = no correct physical responses
 - 1 = poor enactment - e.g. claps once/ touches face/ stands/ OR only 1 fully correct
 - 2 = basic enactment - e.g. claps more than twice/ touches tongue /half turns/ OR 2 fully correct
 - 3 = exact enactment/ ALL 3 fully correct

Please will you ...
... touch your nose (pause for understanding) ... with your thumb.

Expected Response Guide:
Listen for instruction – eye-contact and concentration
Follow instruction = enactment and precision

Please will you ...
... stand up (pause for understanding) ... and turn all the way around.

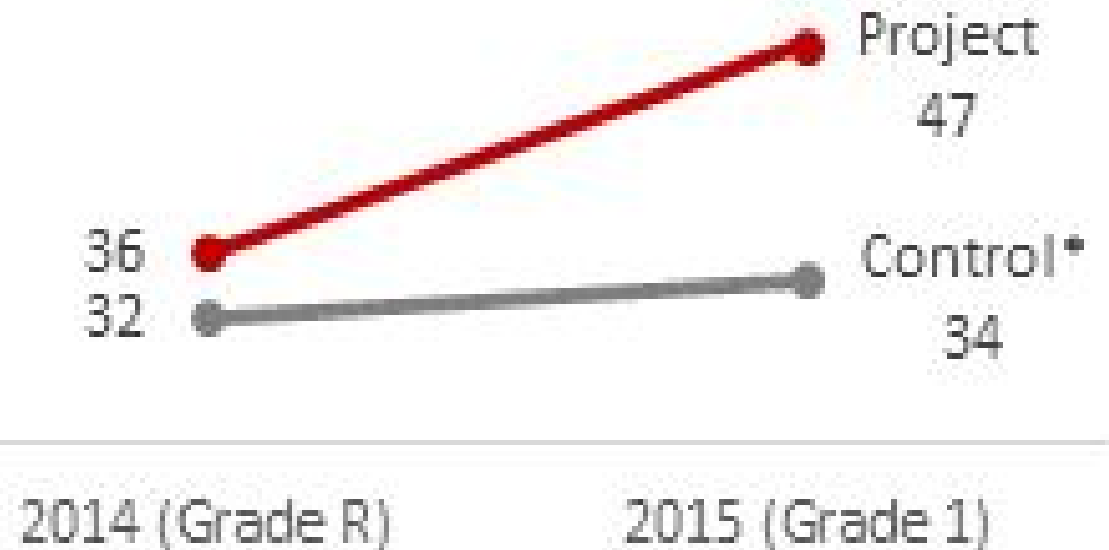
Expected Response Guide:
Listen for instruction – eye-contact and concentration
Follow instruction = enactment and precision

Oral Language Stages

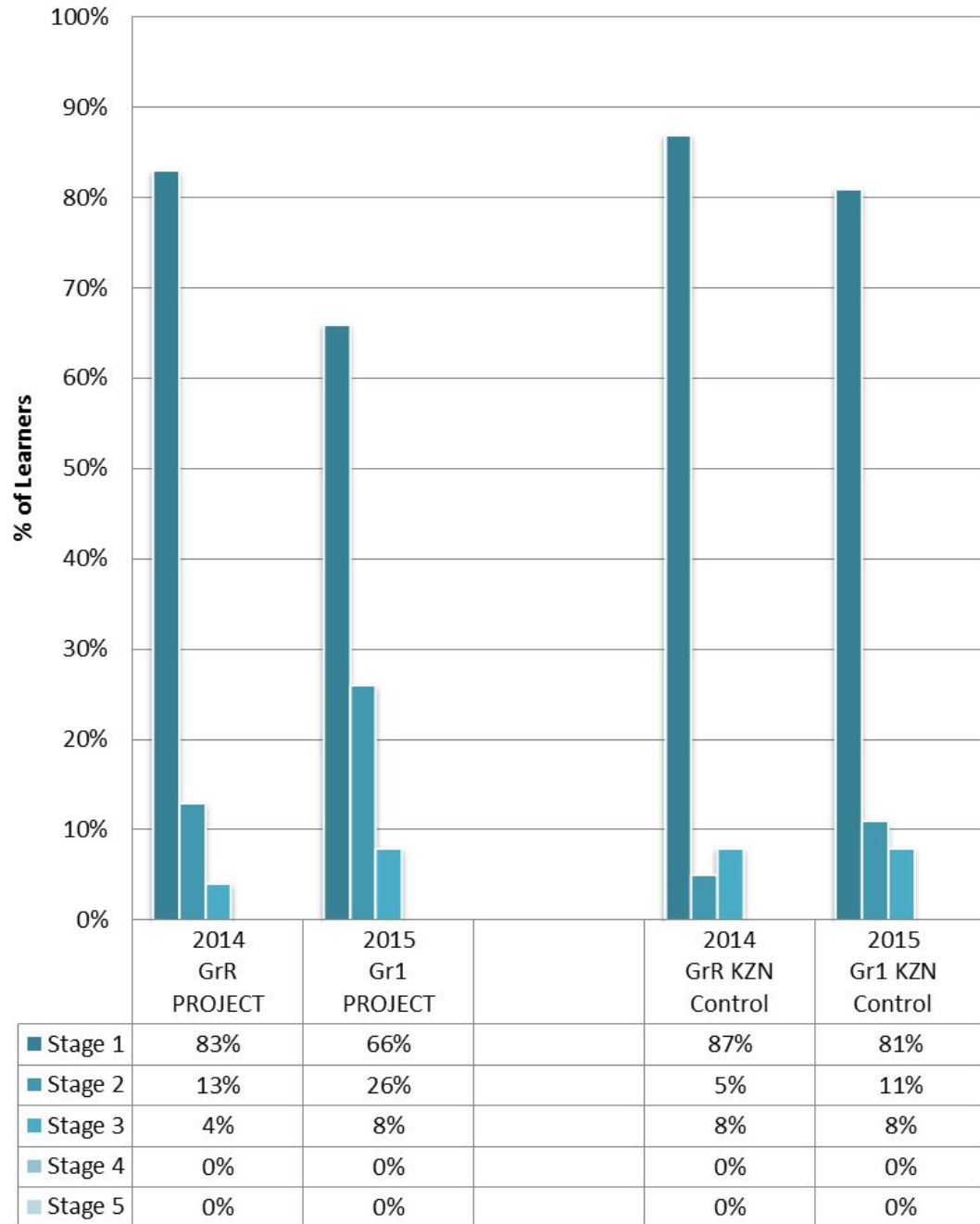
1. **The Silent stage:** Learners express no verbal expression but may respond by nodding, pointing, gesturing or performing an act;
2. **The Early Production Stage:** Learners can speak in one- or two-word phrases. Can demonstrate comprehension by short answers to simple yes/no, either/or who/what/where questions. They nod and shake heads and may say “I don’t know”;
3. **The Speech Emergence Stage:** Learners begin to use dialogue and can ask and answer simple questions. Learners use basic and repetitive patterns of speech. They may produce longer sentences but often with grammatical errors that interfere with communication;
4. **The Intermediate Language Proficiency Stage:** Learners start to make complex statements, state opinions, ask for clarification, share thoughts and voluntarily speak at greater length and
5. **The Advanced Language Proficiency Stage – Advanced Language Fluency:** Learners are now equipped to participate fully in grade-level classroom activities – may need occasional support

- If we follow our cohort, all schools showed improved oral English skills from Grade R to Grade 1 which was expected
- However Oral English acquisition among the cohort improved significantly more at project schools (where it went up 11 percentage points) than at the KwaZulu-Natal control school, where it went up only 2 percentage.

Oral English acquisition



LGP - Cohort English Oral Language Stages



- Considering the oral language stages, the project cohort shows more than twice the improvement than the control cohort shows.
- The number of children rising up to a new oral language stage in the project schools has more than doubled.

What have we learned?

- Dosage Matters
- Even for free learning teachers are vital
- Curriculum pressure is significant



Conclusion

- We will build on this learning as we continue with the project.....
- During the third and final year of the study the focus will include case study methodology
- There will be an attempt to measure the depth of professional development as well as the extent of exposure to the technologies given to learners by specific teachers and what effect this dosage has on learning gains.



**Thank you
Grazie**

www.learninggains.schoolnet.org.za
www.schoolnet.org.za

References

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