

GAME-BASED LEARNING AND READING CATCH-UP, GRADE 3

The reading catch-up built from games they already knew

One rural Philippine classroom's reading programme, translated for any primary teacher building games into a reading lesson.

How many of your struggling readers would engage more if the next lesson began with a game?

In one line

A signal about local games and struggling readers, not a tested method: after eight weeks of community-game reading lessons run by their own class teacher, all 36 learners in one Philippine Grade 3 class moved from below the pass mark to a class average of 'satisfactory' on a validated reading test, but there was no comparison class, so an ordinary term's progress cannot be ruled out.



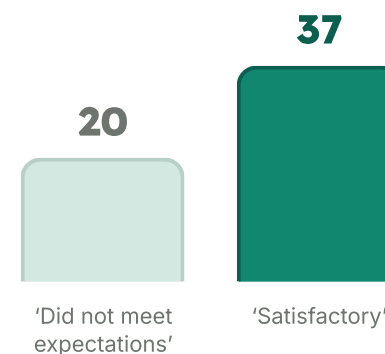
Every learner started below the pass mark

A class teacher at a small, remote elementary school in Malaybalay City Division, Bukidnon, ran eight weeks of game-based reading lessons with her own Grade 3 class (36 learners, an Indigenous Peoples and mixed-tribe community). Vocabulary, word decoding and reading comprehension were tested before and after with a validated 45-item reading test, using games built from activities the class already knew, not a bought resource.

- ✓ **The whole class started below the pass mark** · All 36 learners (100%) scored 'did not meet expectations' on the pretest, across vocabulary, decoding and comprehension
- ✓ **The class average moved up two whole bands** · Overall score rose from 20 to 37 out of 45: from 'did not meet expectations' to 'satisfactory'
- ✓ **Every sub-skill improved** · Vocabulary and word decoding reached 'very satisfactory'; reading comprehension reached 'satisfactory', the smallest of the three gains
- ✓ **The pre/post difference was statistically significant** · Paired t-test: $t=-20.40$, $p=.00001$, $n=36$ (no standardised effect size, such as Cohen's d , was reported)
- ✓ **Learners linked their progress to the games themselves** · Interviewed learners said the familiar, community games made lessons easier to follow and more enjoyable

Class average reading score, out of 45

The whole class's average score on the same 45-item test, before and after the eight-week programme.



Out of 45 points (15 each for vocabulary, word decoding, reading comprehension). Both scores are the whole class's average.

One class, no comparison group tested in parallel: an ordinary eight-week term's progress on its own hasn't been ruled out.

What the games actually asked learners to do

SUB-SKILL	WHAT IT SOUNDS LIKE AT SCHOOL (OUR EXAMPLE)	WHY IT'S WORTH NOTING
Vocabulary	<i>"Whoever lands on this square: what does the word mean, and can you use it in a sentence?"</i>	The study describes vocabulary activities as requiring learners "to identify the meaning of the word and use it in a sentence." Vocabulary moved from 'did not meet expectations' (6.36 of 15) to 'very satisfactory' (12.81 of 15), the largest of the three gains.
SL GUIDANCE Do it well, for every learner: any game with a word card or tile can carry this same two-step: meaning first, then a sentence of the learner's own.		
Word decoding	<i>"Sound it out inside this sentence, not just the word on its own card."</i>	Decoding activities required learners "to read different words in context through sentences and paragraphs," not isolated word lists. Word decoding moved from 'did not meet expectations' (6.72 of 15) to 'very satisfactory' (13.08 of 15).
SL GUIDANCE Do it well, for every learner: swap an isolated phonics drill for decoding practice built into a game's own sentences or instructions.		
Reading comprehension	<i>"What does this card say happens next in the story?"</i>	Comprehension activities asked learners "to analyze words, phrases, sentences, and paragraphs in the games." Reading comprehension moved from 'did not meet expectations' (6.14 of 15) to 'satisfactory' (10.53 of 15), the smallest gain of the three.
SL GUIDANCE Do it well, for every learner: write comprehension questions into a game's own cards or instructions, rather than a separate worksheet afterwards.		
Familiar, not bought-in	<i>"The way of learning is innovative because it uses community games that we play every day."</i>	One interviewed learner's own words (L4). The study's central design choice was to use games the learners already played at home and in the community, rather than an unfamiliar or purchased resource, which several learners linked directly to why the lessons worked for them.
SL GUIDANCE Do it well, for every learner: before buying a new reading-games resource, audit what your own class already plays, and build the reading task into that.		

The honest fence: where this evidence stops

One class, no comparison group

The authors themselves recommend that anyone replicating this study “initially engage in a meticulous process of identifying and selecting an appropriate control group”: this study had none.

The teacher was also the researcher

The class's own teacher designed the programme, delivered it, marked the pretest and posttest, and personally interviewed her own learners about it afterwards. No independent tester or interviewer was involved at any stage.

An ordinary term's progress isn't ruled out

With no comparison class run in parallel, eight weeks of any reading focus, practice effects from sitting the same test twice, or simple maturation could all contribute to the gain.

No effect size is reported

The paper reports means, standard deviations, and a paired t-test ($t=-20.40$, $p=.00001$), but no standardised effect size such as Cohen's d . We have not calculated one ourselves.

The published tables don't fully agree

The overall-score summary table's post-test percentages exactly duplicate a different sub-test's percentages elsewhere in the paper, and its summary means (20/37) differ from the significance-test table's means (19.22/36.42) for what appears to be the same measure. We have relied only on the internally consistent figures.

One community, games never named

The class is one small, rural, Indigenous-community school in Bukidnon. The 'games' are described only as three general activity types, never named or detailed, so what would travel to another class or another set of games is untested.

● Early signal

One classroom's own before/after account, worth testing further, not a controlled study. A version of this taught with a matched comparison class, an independent tester, and a named, described set of games would raise this to Developing.

Worth testing: is it familiarity, not gaming itself, doing the work?

The striking part of this account isn't that games can carry a reading lesson, it's that these were games the class already played at home and in the community, folded into vocabulary, decoding and comprehension tasks rather than replaced by a new resource. If a class that started entirely below the pass mark moved to a class average of 'satisfactory', it may be worth testing whether familiarity with the game, not the fact of playing a game at all, is what is doing the work, before assuming any game-based resource would produce the same shift.

1

Audit what your class already plays

Before buying a reading-games resource, find out what games your own learners already know, at home or in the playground, and build the reading task into that.

2

Test before, test after, on all three sub-skills

Use a simple, consistent check of vocabulary, decoding and comprehension before and after any games unit, so it shows its own evidence, not just enjoyment.

3

Hold back a comparison where you can

Where timetabling allows, run the same weeks with one class or group doing the games and one continuing as usual, so gains aren't just an ordinary term's progress.

Early signal, so run it as an experiment: build one familiar game into a single upcoming reading unit, test the same three sub-skills before and after, and compare against a class or group that didn't get the games.

Why not try? Planning a before/after check into your next reading unit is easier with a framework to build against. Open a free account to plan your next reading lesson at app.structural-learning.com.