



UNIVERSITY OF  
CAMBRIDGE

The LEGO Foundation

# Towards a playful pedagogy in Literacy

The Play, Learning and Narrative Skills (PLaNS) Project



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# Introduction

*This brochure is a collaboration between the University of Cambridge and the LEGO Foundation*



**On the following pages, researchers David Whitebread and Marisol Basilio illustrate the playful approach to teaching literacy they developed in collaboration with teachers during the PLaNS project, and share some of their initial findings:**

In the PLaNS project, we developed and evaluated an innovative approach to teaching narrative and writing skills in primary education through *guided play*<sup>1</sup>. This approach gives children control over their learning process in a manner that is fun, hands-on and engaging, while providing the necessary instructional support through the design of activities and explicit learning objectives.

We worked closely together with nine teachers to design and implement pretence and construction play activities that supported the writing, storytelling, creativity and collaboration skills of primary students in Year 1, 3 and 5. Over the course of a full academic year, teachers tried out new activities in their classrooms and met regularly with our research team.

We worked as a learning community linking research and practice, documenting the experience, and developing the key pedagogical principles of our playful approach:

## Key pedagogical principles

- Teacher-designed activities embedded into the literacy curriculum
- Multimodal approach using LEGO® bricks as a physical and symbolic form of representation: children used different media to represent their ideas – using LEGO bricks to “build their stories”, taking pictures, drawing, as well as writing.
- Collaborative activities: children worked in small, mixed-ability groups to build collaborative LEGO models
- Guided play approach: children decided what to build/write and how to go about it, with scaffolded support from teachers
- Writing with a purpose: children wrote about their own LEGO creations, and produced a variety of texts for different audiences to showcase their work
- Dialogic learning promoting “talk rules”<sup>2</sup> and “talk for writing”<sup>3</sup>: children discussed the best ways to learn as a group, and were allowed time to talk through and rehearse their ideas before writing
- Metacognitive discussions about working together, collaborative problem solving and writing: children practiced the ability to think about their cognitive processes and learning process, prompted by teachers’ questions
- Playful and relaxed environment in which children showed high levels of engagement

1) Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided Play: Where Curricular Goals Meet a Playful Pedagogy. *Mind, Brain, and Education*, 7(2), 104–112.

2) Mercer, N. (1995). The Guided Construction of Knowledge: Talk Amongst Teachers and Learners. *Multilingual Matters*.

3) Corbett P., & Strong, J. (2011). Talk for Writing across the Curriculum: How to teach non-fiction writing 5–12 years (Pap/DVD Re edition). Maidenhead: Open University Press.

# Lesson example

*For this lesson, the teacher and children used the story 'The Enchanted Wood' by Enid Blyton as the starting point for discussion, and went on to develop ideas for building and writing about their own "faraway lands"*

**Before building: set the scene – explain the task – inspire ideas and write down decisions – remind children about "rules for talking"**

The scene was set with the teacher asking questions about the story: "So the last line of that chapter was 'I vote we don't ever come back to this tree'. But of course, they did go up to the tree again. And every time they went up to the tree, they found a different land." In groups, the children discussed what they did and did not like about this different roundabout land.

Next, the task was explained by the teacher: "Today we're going to be thinking about if we went up to the faraway tree, what land might we find?" Using whiteboards, the children and teacher jotted down ideas for two minutes, and then shared them: from a no-vegetable land and dog land to a noisy land (where everything talks), giant land, trampoline land and a jelly land.

Finally, the children went through their "rules for talking" (e.g. "think about big ideas" or "I will not talk when someone else is talking"), and which ideas to use as a group. The teacher supported their teamwork and reminded them of the importance of compromising. Once the children had agreed, they wrote down their decisions.







## Lesson example (cont.)

**During building: encourage children to plan before building – ask them to explain their models – remind children of the time**

A girl and a boy decided to make Zombie Land together first, another girl decided to make Gummy Bear Land first. They agreed to put all the lands together afterwards. The children negotiated underway:

“I’ve got a great idea. I found something, this could be a head.” The boy had found a cylinder piece and showed it to his partner: “I think they should be their ears. Maybe they can be their shoulder parts.”

The children were engaged and would mix playful moments of pretending to walk like a zombie with spurts of focused building.

**Transition to writing: let children share their models – encourage them to think of how to make good sentences – ask children to jot down ideas and writing plans**

Once the children had cleared away their leftover pieces and the box of LEGO bricks, they took turns explaining their models: “This is Fish Land and they’ve got some doors. They’re neighbours and if you want to leave, you

just jump out the door and into the Gummy Land.” Then the teacher asked them to imagine going up to the top of the faraway tree: “So if you come out to the land, what’s the important type of information that you’re going to include, what they can hear, what they can smell, and what they can see?”

The children discussed what information to include and spoke out descriptive sentences, such as “slowly and cautiously Joe steps onto the land”. The teacher gave them time to jot down their ideas for writing on the whiteboards. As the children wrote, they talked about words for their writing and discussed how their story would develop. They acted out what happened next with their models and then came back to their writing. Once finished, they were asked to re-read their stories, check punctuation, and see whether they needed to improve anything.



# Initial findings

While not the main purpose of the study, we wanted to find out whether dedicating less time to formal instruction and more time to playful activities would affect children's school marks. These marks are based on the National Curriculum Levels, which evaluate formal aspects of writing, such as, spelling, paragraph composition and text coherence.

We compared the progress of the 108 children who participated in the project and children from the same teacher's previous year group according to school marks: Children in the PLaNS project improved in the formal aspects of writing, just as much as their peers.

**Contrary to popular belief that "play in the classroom is a waste of time" our results indicate that children learnt just as much as they were required to do in the course of an academic year"**

We see this a very promising result, since children in the project spent a considerable amount of time playing and planning through collaborative building activities, as compared with more traditional forms of writing instruction.

## Motivation for writing

We also presented children with a creative writing task. They were given a picture and a set amount of time to write a story independently, with no teacher support at all. The results below are based on changes observed in the progress of children who participated in the project:

Children wrote for longer and produced more creative stories at the end of the intervention. Although we expected that children's texts would be longer because their writing abilities improved throughout the year (including the speed at which they can write), it was interesting to see that children's stories were longer because they independently dedicated more time to writing their stories. We see this as a measure of their motivation to write, which previous research shows is key to improving writing skills.



## Creative storytelling

Creativity is difficult to define and to measure, but a common method used in research is to ask a group of people to assign a score to creative products according to their own understanding of creativity. This is what we did with children's stories at the beginning and the end of the year. We found that – overall – children's stories were more creative towards the end of the year.





## Initial findings (cont.)

### Metacognition

Writing is a complex activity that requires good thinking strategies. We explored children's metacognitive skills or ability to control thinking processes and the knowledge they had about them. We found that their ability to plan and control these processes improved during the year. Children who held more elaborate and accurate beliefs about the cognitive demands of writing had better writing scores.

### Collaborative skills

Finally, we were interested to know if children engaged in meaningful dialogues about their stories in the groups, if they could organise the group activities to complete their LEGO models, and if they were actively engaged and playful when working together. Our results show that children learnt to collaborate in groups, showing more "good group work" skills towards the end of the year. Most interestingly, we observed that groups in which children were more playful were also the groups to show better collaborative skills.



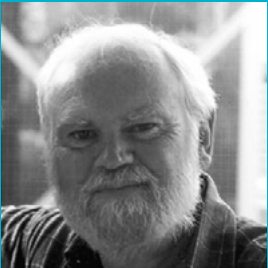
# Contact and acknowledgements

We are extremely grateful to teachers and students for their enthusiastic participation in this research project.

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For more information visit:  
[www.educ.cam.ac.uk/centres/pedal/](http://www.educ.cam.ac.uk/centres/pedal/)

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"I enjoy it because you get to make things and learn things about what you've made, because when you do the writing you look at it and you actually learn how to write from it"

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PLaNS student

