TEACHING WITH INTENT
Scaffolding academic language with marginalised students

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PART 1

FOUNDATIONS OF TEACHING AND LEARNING
CHAPTER 1

Introduction

HOW THIS BOOK CAME ABOUT

This book is one outcome of a research project entitled *Scaffolding academic language* (Harper & Parkin, 2017), funded by the Primary English Teaching Association of Australia (PETAA) in 2016–17. Our purpose was to investigate effective ways of developing academic language with educationally marginalised students. The focus on science was a collaboration between two researchers, Helen Harper and Bronwyn Parkin, and two dedicated classroom teachers, Michael Cannavan and Louise Walker. Michael and Louise were already adept at applying the principles of ‘scaffolding’ pedagogy in their classroom, but our project provided the catalyst to look closely at how these principles could be used effectively in science. Their class had a high proportion of students with English as an additional language, many having recently graduated from an Intensive English class for newly arrived migrants.

We visited Michael and Louise’s science classes for a week on two occasions and videorecorded their lessons. We planned lessons as a group, with Michael and Louise team-teaching and Bronwyn and Helen observing. We met at the end of each day to reflect on the lessons and to refine language and activities. Through the teaching and learning of two Year 7 topics, Electric Circuits and Eclipses, we gradually established reliable pedagogic principles to support students’ language learning in science and scientific learning through language.

The outcomes of the research and the contents of this book are the result of praxis – theory strengthening practice, and practice strengthening theory – and of researchers and teachers collaborating in productive and satisfying ways based on mutual respect and trust. We thank Michael and Louise for their willingness to participate.

OUR MOTIVATIONS

As researchers and teachers, the authors of this book work to enhance the role of education, and in particular the teaching and learning of literacy, as a tool for social justice. In order to do this, we recognise the importance of making explicit the goals of the curriculum, and of the learning activities used to teach the curriculum. We recognise that these goals stem from social purposes that are deeply embedded in our Western and global cultures, and that these, too, must be shared with students, not left for them to infer. Importantly, we recognise the centrality of language as a teaching tool, and the importance of powerful language as both a tool for, and an end-product of, learning.

For several decades, we have focused our work on improving the educational outcomes of educationally marginalised students, particularly Indigenous students, and particularly in literacy. While the pedagogic approach taken in this book is relevant for all learners, it is principally intended to assist educationally marginalised students in being successful learners and to contribute to them becoming active, participating citizens.
WHO ARE EDUCATIONALLY MARGINALISED STUDENTS?

In the Australian context, the *Education Act 2013* identifies educationally marginalised students as those categories of students for whom schools attract additional financial support. The categories are Indigeneity, geographic isolation, low English proficiency, low socio economic status, and students with a disability. At a system level, additional funding is provided to support these students. But from the daily perspective of the classroom teacher what matters most is how to effectively include educationally marginalised students in the class, ensuring that all students learn successfully at an age-appropriate level (van Lier, 2004).

In the classroom context, educationally marginalised students are those for whom school doesn’t make sense; who don’t seem to understand what is going on. There are many markers of the educationally marginalised within the classroom. They can be the students whose attention span seems to be very short, because they don’t really know what they’re supposed to do, and the ones who give up quickly when the task gets too hard. They can be the students who have developed great avoidance tactics like sharpening pencils or blowing their nose or tracing over and over the few words they’ve written rather than take risks with writing more. They can be noisy and disruptive to avoid engaging in a task, or they can be silent, with heads bowed, hoping you won’t ask them a question. If you find yourself responding to their answers with ‘Good try, but …’, the chances are that these are students who are not making sense of your teaching, who are physically and metaphorically situated at the fringes of the learning group.

As teachers, we are responsible for helping students make sense of what they are learning at school. We do this by making explicit the learning goals and the processes for reaching them including, importantly, powerful language. This book is about bringing students in from the fringe to become confident and participating members of our classroom learning communities.

WHAT IS PEDAGOGY?

The word ‘pedagogy’ derives from the Greek, meaning ‘leading the child’ (Roth & Lee, 2010). While it is sometimes loosely defined as the ‘art and science of teaching’, we regard pedagogy as the classroom teaching practices which take into consideration three intersecting elements: the role of the teacher, the role of the student, and the role of the curriculum. As teachers, the way we manage our teaching and learning context reflects our beliefs about those roles, about what is acceptable and valuable.

WHY FOCUS ON THE LANGUAGE OF SCIENCE?

Each learning area in the curriculum has its own powerful language, consisting of powerful texts, powerful technical language and powerful grammar. The language of science can seem especially impenetrable to the uninitiated. To manage this load, it is tempting to present science as either ‘gee whizz’ displays of phenomena that seem like magic, or else to stay safely within the realms of students’ everyday experience for most of the available teaching time. By contrast our aim in this project was to tackle upfront the challenge of thinking and talking like scientists.

We chose to focus on science because it is such an important area of understanding in the 21st century. At a minimum, a layperson’s grasp of science is regarded by many as being a prerequisite for participatory citizenship. Understanding the science behind climate change, the science that supports healthy living and the science that supports a sustainable way of life all contribute to positive membership of contemporary societies.
Secondly, enrolment in post-compulsory secondary science subjects is diminishing each year. It has never been strong for low socioeconomic and Indigenous students. A lack of participation in secondary schooling inhibits access to science-focused future careers such as engineering and health. We want educationally marginalised students to have a choice in their careers, and understanding science is an important potential choice that is currently blocked for many.

**WHAT THE REST OF THE BOOK IS ABOUT**

This book is primarily about classroom practice and the principles that underpin effective pedagogy. It focuses both on the **language of the teacher** (the language we use to support students to learn), and on the **powerful language that students need to appropriate** for successful learning.

The book is divided into four parts. Part 1 introduces the theory – the important foundations of teaching and learning that provide a lens through which we observe our practice.

Chapter 2 discusses different approaches to pedagogy. How can we categorise different types of pedagogy, and on what basis do we choose an approach that fits our students? No pedagogic approach is neutral, and we introduce the pedagogic quadrants of Basil Bernstein as a way of reflecting on the affordances and constraints of pedagogic choices in teaching and learning (Bernstein, 2000). We explain why we’ve settled on one particular approach within one of Bernstein’s four quadrants as the best chance of providing an effective pedagogy for educationally marginalised students.

Chapter 3 is a brief introduction to powerful language in the curriculum area of science. It draws from the work of systemic functional linguistics to describe powerful text, word, grammatical and visual choices in a way that is consistent with the **Australian Curriculum: English** (ACARA, 2016) and the **Australian Curriculum Literacy capability** (ACARA, 2013).

Chapter 4 introduces the theory behind the pedagogy outlined in this book, a version of ‘scaffolded pedagogy’ or simply ‘scaffolding’. It explains how it is different from other forms of assistance often provided in desperation to low-performing students. It also explains the difference between the ‘macro-scaffold’ (a teaching and learning sequence) and the ‘micro-scaffold’ (the moment-by-moment negotiation of language and meaning which constitutes classroom dialogue).

Part 2 shifts to the practical, taking us into the classroom. Chapter 5 lays the foundations for a language-focused classroom by introducing a central pedagogic tool, the focus text. We explain why developing a focus text is so useful to teachers for planning, teaching and learning, and assessment in a language-focused classroom, and we provide a guide on how to write one.

Chapter 6 introduces the macro-scaffold. This is a topic planning framework that will help teachers to become conscious of the teaching and learning of powerful scientific language, and to plan for it in an intentional, goal-oriented, systematic way. It explains how the focus text can be a useful tool in planning a topic logically and systematically.

Part 3 elaborates on the use of purposeful classroom dialogue. Chapter 7 addresses the teaching and learning negotiation in the classroom (that is, classroom dialogue, which we have labelled the ‘micro-scaffold’). The micro-scaffold is the language used by teachers that helps students to take up powerful scientific language and think like a scientist. The chapter explains why teacher talk has to change over time to support ‘handover’ (students taking up the learning), and why the language choices we make in classroom dialogue need to be nuanced and dynamic. We acknowledge that it can be very uncomfortable and exhausting when teachers begin paying attention to their talk, moment by moment. Nevertheless, this is what we need to do for effective teaching.
In our research, we have searched for some tools to help make this effort more manageable for teachers. Recognising the overarching purposes of teacher talk is one way of organising and giving us a focus for how we think about it. Working with and observing teachers, we have identified three pedagogic purposes for teacher talk: first, to orient students to the world of science; second, to make sure all students feel welcome enough to persist, while at the same time taking up new learning; and third, to make sense of all the different symbols and tools valued by science: diagrams, models, videos, charts and text. We can think of these purposes as three lenses through which to view a lesson.

Chapters 8, 9 and 10 discuss the three lenses in turn and from our research provide examples of the strategies that can help teachers address each of the overarching purposes of classroom talk and thus learn to manage the complexity of scaffolding.

Part 4 tidies up the loose ends. Chapter 11 addresses the topic of assessment. If we are to make language a focus of our teaching and learning, and if we are to take seriously the notion of providing the right level of support so that educationally marginalised students are successful without being handed a ‘dumbed down’ curriculum, how do we create appropriate assessment tasks, and how do we decide on assessment criteria that cover content as well as language?

Finally, Chapter 12 looks at how to transfer the principles and practices of scaffolding pedagogy into other learning areas such as history and mathematics in ways that open up access for all students, not just those whose home practices already support such learning.

Throughout the book, we have tried to make sure that the pedagogy proposed here enables learning for all students. We want to ensure that educationally marginalised students feel included, making sense of the classroom context through explicit and nuanced teaching, and successfully learning. We also provide suggestions for differentiation so that, as teachers, we can effectively support all students to move beyond what they can already do, consciously controlling new language as a tool for learning.