1. Introduction

The quality of child-directed input has a strong impact on children’s learning and language development (Hoff, 2003; Vygotsky, 1978). Crucially, this is most influential when combined with methods that facilitate interaction (e.g., Pianta, Hamre, & Allen, 2007). Such an approach is widely implemented within the literacy classroom through guided reading (Oxford Primary, 2014). Although previous research has demonstrated the effectiveness of many of the techniques used in guided reading (e.g., Taylor, Pearson, Clark, & Walpole, 2000), there is substantial variability in what teachers do and, therefore, in our understanding of the specific strategies that should be used to apply those techniques (Ford, 2015). This paper aims to use large-scale corpus methods in order to identify the fine-grained language features of teacher input, and to examine how these features vary according to children’s age, reading ability, SES, and teacher experience.

2. Background

In guided reading sessions, a teacher works together with a small group of between 4 to 7 children on a reading activity and adapts their input according to learner responsiveness (Fountas & Pinnell, 1996; Oxford Primary, 2014). A teacher is expected to progressively increase the challenge of the session for children who display higher levels of competence in order to encourage a more independent and adult like contribution. This technique is used to scaffold the discussion and provides opportunities for children to engage in higher-level thinking about the text. For example, the teacher might ask more demanding questions or comments, or remodel a child's utterance into a more meaningful and grammatically advanced utterance.

Previous research has demonstrated the effectiveness of many of the techniques used in guided reading. For example, Taylor et al. (2000) reported that children who displayed higher growth in reading assessments over a 5 month period, were more likely to have teachers who provided small group instruction (vs. whole group), practiced more scaffolding of the discussion (vs. telling), and asked more higher-level questions (vs. low level). However, surveys indicate that teachers lack awareness for the specific strategies that should be used in guided reading (Ford, 2015; Ford & Opitz, 2008). Moreover, observations indicate that sessions are still dominated by teacher talk (i.e., telling), despite the recommendation that teachers should place emphasis on scaffolding the discussion (e.g., Frey & Fletcher, 2010).

The findings outlined above motivate a more detailed understanding for how guided reading is implemented. Previous research on this topic has typically taken the form of observational studies, in which researchers have had to laboriously parse and hand-code transcriptions of the teacher-children interactions (a corpus) to
identify teacher strategies of interest. Because this is a long and painstaking process, it limits the size of the corpus to one that can be coded within a realistic time window. In this project, we maximise interpretation of naturalistic classroom interactions by using powerful corpus search tools. These enable precise computer-searches for a wide range of language features, and are much faster and more reliable compared to hand-coding. This affords us to create and explore a much larger corpus of guided reading sessions than in previous studies, making a fine-grained analysis possible.

Our first aim is to identify the fine-grained language features of teacher input. Second, we examine how these features vary according to children’s age, reading ability, SES, and teacher experience.

3. Method

We collected a corpus of teacher-child interactions during guided reading sessions, approaching 500,000 words. The corpus represents recordings of 103 sessions that each typically lasted between 15 and 35 minutes. Recordings aimed to be non-invasive to the normal proceedings of a session. Teachers (N = 22) and children (N = 119; aged 5 to 11 years) were from school districts serving different socio-economic status. The language features of teacher input are analysed using the corpus tool CQPweb (Hardie, 2012). This process draws concurrent work that successfully created a set of corpus queries which can identify a range of question types that may be involved in scaffolding language (Smith, 2016).

Background measures were taken of children’s reading ability, and teacher experience.

4. Results and discussion

Early exploration of the corpus indicates that we will uncover a wide range of language features that can be organised onto a continuum from low challenge strategies (e.g., asking wh-questions that constrain responses, such as what, who and where) to high challenge strategies (e.g., asking wh-word questions that elicit evaluative responses, such as how and why).

We anticipate that low challenge questions and strategies will be more frequent for younger age groups and for groups with lower reading ability and that high challenge questions will be more common for older age groups and groups with better reading skills. This can be attributed to the notion that 4-year-olds are only just beginning to develop their ability to read words on a page, so teachers are more likely to focus on ways of improving their accurate translation of print into word meanings (i.e., decoding skills and vocabulary). Conversely, older children are able to read words relatively well, so teachers are more likely to target improving an understanding of the language that has been accessed from the printed word (i.e., reading comprehension skills).

In addition, the data is explored in relation to SES and teacher experience, particularly with regard to how these factors influence the trade-off between teacher-dominated ‘telling’ talk versus language scaffolding. The findings will also provide the groundwork for a future investigation into how language features might influence the quality of children’s responses.
References


