Short answers to deep questions: insights from tutorial dialogue

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It is well established that teaching interactions, such as formative feedback, are central to deep learning and ultimately student engagement and academic success (Zepke and Leach, 2010; Hattie and Timperley, 2007, Hattie, 2009). However, in large class settings (formal University or tertiary classes, informal MOOCs or open education courses) the options for individualised interaction with teachers, in particular through formative feedback on student writing (short answers and longer essay style), remain severely restricted. In order to address the practical problem of automating the analysis of student responses we suggest that it is essential to explore the complex relationships between language, learning and teaching.

There are broad parallels between constructivist theories of learning such as those of Vygotsky and the systemic functional linguistics theory of M.A.K Halliday (Wells, 1994). At a practical teaching level, the academic literacies approach to academic writing (Lea and Street, 1998) embodies the idea of writing as 'process and product'; it is both generated by and produces its wider context. This approach aligns well with corpus studies which provide clear empirical evidence for disciplinary differences in writing style (Biber, 1998). More recently, evidence for distinct disciplinary literacies has appeared through functional linguistic analyses of disciplinary texts (e.g. Fang, 2012). Some scholars differentiate what they term disciplinary literacy from more general literacy skills (Fang,2012; Hynd-Shanahan, 2013).

In this poster, we use the concept of disciplinary literacy to frame our research and situate it in the context of discourse-centric learning analytics (Knight, and Littleton, 2015; Ferguson and Shum, 2012). We describe a preliminary analysis of student written responses, captured by a surface-based natural language tutorial dialogue system, in a large-class setting (McDonald et al. 2012 and 2013) and present discourse examples, which illustrate the nature and quality of the students' responses and the relationship between responses and curricula material. Working from these examples we briefly illustrate the use of automated techniques to facilitate analysis of the teaching and learning discourse.

For example, through the use of corpus techniques such as collocation and concordancing we identify where student responses to deep questions such as, *please explain ... or please describe ...*, are directly derived from course materials or lessons, sometimes in unexpected ways. Often student responses are coherent but are written in non-specialist language and automated techniques such as keyword identification coupled with concept mapping can provide an indication of disciplinary language adoption.

Using the examples as a base we identify two specific challenges related to learning in large class settings: Can we harness the power of discourse-centric learning analytics to characterize the language that students use and develop in a disciplinary context? Can we characterise disciplinary language and compare it with student language (or interlanguage) to provide actionable insights for teachers?

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Uncover the Deep Learning Interview Questions which cover the questions on ☞ CNN ☞ Neural Networks ☞ Keras ☞ LSTM that will be asked in Deep Learning interview. Long-Short-Term Memory (LSTM) is a special kind of recurrent neural network capable of learning long-term dependencies, remembering information for long periods as its default behavior. There are three steps in an LSTM network: Step 1: The network decides what to forget and what to remember. The questions are categorized in three different sets, with each set of questions a little bit more personal than the last. You'll take turns with your partner asking these questions, and both answering the questions. It's important to NOT skip the questions, even if you know the answer to them. Keep in mind, vulnerability brings people closer. The point of these questions is to have sustained, escalating, and reciprocal self-disclosure. Take time having both people answer the questions and truly listen to the answers without judgment. It'll look something like this: Person A asks the first question. Interview questions with example answers. Here are several common interview questions to prepare for your next interview, including best practices and examples for answering each: 96. Tell me about yourself. At the beginning of the conversation, your interviewer will likely start out by asking you about yourself. With this question, your interviewer wants to learn how your qualities and characteristics align with the skills they believe are required to succeed in the role. To answer this question, pick one to a few personal characteristics and elaborate on them with examples. For example, if you are ambitious and driven you can say: "I am an ambitious and driven individual. Asking the right question is at the heart of effective communications and information exchange. By using the right questions in a particular situation, you can improve a whole range of communications skills. For example, you can gather better information and learn more, you can build stronger relationships, manage people more effectively, and help others to learn too. In this article and in the video, below, we will explore some common questioning techniques, and when (and when not) to use them. Click here. to view a transcript of this video. Open and Closed Questions. A closed question usually receives a single word or very short, factual answer. For example, "Are you thirsty?" The answer is "Yes" or "No"; "Where do you live?" Types of Short Answer Questions. Now let us take a look at the six most common short-answer question prompts: define, explain, give an example, relate, calculate, make a graph. If you familiarize yourself with them, you can learn how to write short answer questions. Define. Even if you are not sure how to write short answer questions in some cases, never leave the question blank. Always write down something because you at least stand a chance of getting partial credit. Deep down Celie admires Sofia and feels motivated by her resolve, especially when she says, "I will kill him before he beats me up" (Walker 1982, p. 107). Sofia wants respect, equality and justice as men command. Question 4.