

The effect of contributor roles in Knowledge Building discourse: Can expanding individual contribution repertoires lead to group knowledge advancement?

Introduction

“Progressive discourse” (Bereiter, 1994) can be described as collaborative dialogue that advances through continued efforts to deal with puzzling facts. It is the driving force behind Knowledge Building pedagogy, which is an educational approach that takes knowledge creation as its central objective (Scardamalia & Bereiter, 2003). Studies exploring the characteristics of productive collaborative discourse in the classroom show that it requires a variety of contributor roles, such as question-asker, mediator, critical thinker, etc. (Resnick, 1996). Helping students develop capacities for making a variety of contributions to group dialogue is necessary to sustain productive discourse and thus to help them advance their knowledge.

Research Questions

The current study is part of a larger programme of research that includes the development of pedagogical and technical innovations designed to raise the level of student discourse by helping them develop diverse ways of contributing to collaborative explanation-seeking dialogue. The central objectives of this study explore the extent to which i.) students engaged in collaborative knowledge building develop distinct contributor roles or styles; ii.) distinct roles contribute to the knowledge advancement of the group at large.

Dataset and Preliminary Results

This study explores the Knowledge Building work of 39 students across 3 years, beginning in both grades 1 (18 students) and 2 (21 students) and ending in grade 3 and 4, respectively. A total of 668 notes derived from 6 distinct databases of student work will be analyzed according to a “Ways of Contributing” schema developed by the authors, and will also be assessed for epistemic complexity and scientificness of ideas. Preliminary analysis suggests that a fair amount of students show consistent contribution patterns across grades. Moreover, there are a number of “outlier” contributors who dominate one particular role such as “questioner” or “theorizer”. Continued analysis of student work is needed in order to investigate significant patterns within contributor repertoires as well as between outlier roles and group knowledge advancement.

Themes: Intellectual Engagement, Sustained Work with Ideas, Technology for Knowledge Creation.

References

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