Pre-Service Teachers Expansively Framing Their Engagement Through Authorship and Accountability

Grant T. Chartrand, Indiana University, gchartra@indiana.edu

Abstract: This poster reports a preliminary study of pre-service teachers in an online educational psychology course and how they engaged with course content using expansive framing. Learners were asked to socially annotate course readings while engaging with one another. Particular attention was given to how learners exhibited aspects of authorship and accountability. A review of comments and discussions noted the ways learners authored, presented their ideas, and held themselves and each other accountable for their learning.

Introduction

Expansive framing, a pedagogical approach for explaining generative learning, was first introduced by Engle (2006) and further theorized by Engle, Lam, Meyer, and Nix (2012). A recent reconceptualization of expansive framing (Andrews, Chartrand, & Hickey, 2019) prompted a new understanding of the approach from a pedagogical tool to a learning tool. This shift positions learners to experience greater agency (i.e., students making choices that enhance learning), giving primacy to learners over instructors and instructional practices.

Engle et al. (2012) introduced three framing aspects (*time*, *place*, *participants*) in their research on connecting settings and transfer. More recently, Andrews et al. (2019) further specified and extended expansive framing into seven framing aspects (summarized in Table 1). This study focused on how pre-service teachers exhibited aspects of authorship and accountability.

Table 1: Expansive framing aspects and descriptions

Framing Aspect	Description
Time Past	The activity can be linked to a past instance. Learners draw upon prior knowledge to
	connect with current course content.
Time Future	The activity can be linked to a future instance. Learners envision future applications of
	applying the current course content.
Place	The activity is relevant to other situations outside of the course (i.e., other courses, out-
	of-school, at home, at work). Learners draw on experiences from other situations
	during the ongoing activity where the knowledge can be applied.
Topic/Activity	The activity relates to non-course subject areas and topics. Learners connect the
	current lesson with external corresponding lessons and course content.
Participant	The activity is relevant to a broad community that extends beyond the course. Learners
	consider their interactions with their peers and other people.
Authorship	Learners are authors who are responsible for developing, sharing, and defending their
	ideas. Learners may also build upon the ideas of others.
Accountability	Learners are members of a community who feel accountable and hold their peers
	accountable for developing, sharing, and defending their ideas. Learners directly
	engage others and encourage productive discussions.

Theoretical framework

Two theoretical tenets that support this study are expansive framing and productive disciplinary engagement (Engle & Conant, 2002). As introduced above, expansive framing is a framework for encouraging learners to connect course content (i.e., learning context) and personal and meaningful experiences (i.e., transfer context). When learners think expansively, they extend their understanding to situations beyond the course. Social situations can involve other people, places, topics, and times, which are used by learners to frame their engagement with and understanding of course content.

Productive disciplinary engagement involves instructors designing learning environments that promote learner engagement. A key part of productive disciplinary engagement are four design principles, developed by Engle and Conant (2002), that ask instructors to 1) support students as they "problematize" curriculum from their perspective, 2) give students the authority to deeply engage with problems, 3) encourage students to hold themselves and each other accountable for participation, and 4) provide adequate resources (e.g., time, workspace, tools, information, etc.) to accomplish curricular tasks.

Both expansive framing and productive disciplinary engagement are rooted in "situative" theories of cognition (Greeno, 1998). When pre-service teachers take up ways of knowing and learning that align with a discipline (e.g., teaching), they begin to engage in more authentic practices and are more likely to understand the core ideas and use them in other situations (i.e., future practice; Brown, Collins, & Duguid, 1989).

Method

This study involved coding to analyze expansive framing aspects found within pre-service teacher annotations and comments (see Table 1 for coding aspects). Coding for authorship and accountability afforded a glimpse into how pre-service teachers posed questions to their peers, how they took up and extended ideas, and how they collaborated to create new shared understandings. Identifying moments of authorship and accountability can help instructors recognize when pre-service teachers transition from shallow forms of engagement (e.g., sharing and comparing) toward deeper, more productive practices (e.g., challenging and synthesizing).

Data for this study was collected in spring 2019 from an online educational psychology course for preservice teachers. Students (n=20) were given a brief overview of expansive framing at the start of the semester. Students annotated course readings using Hypothesis, an online tool that allows users to collaboratively annotate online documents. A review of the student annotations and the subsequent discussions that took place within those annotations is currently underway. Three readings were randomly selected, one each from the first month of the semester, one in the middle of the semester, and one during the last month of the semester. The data were exported and organized chronologically by reading. Annotations and comments were coded to determine how expansively students were engaging with the readings and with one another.

Preliminary findings

Ninety (90) annotations were produced in the selected readings that were examined and one hundred seventy-six (176) instances of expansive framing were identified in the annotations. The review found that students referenced Participants most often (28%), followed by Accountability (23%) and Authorship (19%). An initial review of the data for this study found that while students did utilize expansive framing in their discourse, they did not do so to the same degree as previously reported by Andrews et al. (2019). In that study, students were found to be more expansive in their annotations (Participants at 76%, Authorship at 71%, Accountability at 39%).

Conclusion

This study continues research in applying expansive framing via social annotation in online courses. Next steps will include a) analyzing additional readings to provide a better representation of this study and its findings in relation to Andrews et al. (2019) and b) conducting a closer interrogation of the annotations to uncover discursive patterns of interaction, if any, concerning productive disciplinary engagement. Results from this study will also be used to support course refinements and ongoing work to scale up and scale out situative design for other audiences (e.g., training and professional development, instructional designers).

References

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