

Productive Subjective Failure in a Learning Community: Process of Explicating and Negotiating Norms

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Abstract: This paper presents a case study of an exemplary blended graduate classroom learning community that showed students taking responsibility over their own collaborative learning. Specifically, the group went through a stage of productive subjective failure before intentionally deciding to explicate and negotiate their own group norms. This transition saw a marked increase in collaboration among group members. Using a micro-genetic interpretive approach, we analyzed the stages of group development that led to this outcome. Our findings indicate that the process of explicating and negotiating norms (PENN) was the climactic event whereby the group transformed their responsibility and collaborative learning behavior. We discuss the implications of our findings, which we believe inform both theory and design of productive failure in CSCL.

Introduction

Productive failure (PF) has generated a great deal of interest by the Learning Sciences community in recent years, offering a new prism to examine learning. As research on PF is still maturing, there has been a call to extend the study of it to different contexts and content areas (Kapur & Kinzer, 2009). One of these areas which is in need of further development has to do with a foundational concept in CSCL: learning communities (LCs), which has a focus on the socio-cultural aspects of learning (Brown, Collins & Duguid, 1989). Bringing PF and LCs together is not only an interesting challenge, but an important bridge to build so that two areas of research can be better connected.

Research on PF has based its definition of failure measured against a canonical standard (Kapur, 2008; Kapur & Kinzer, 2009; Kapur & Bielaczyc, 2012), making it reasonable that attempts that fall short of meeting the standard may still be rewarding, so long as learners engage in sustained, divergent thinking. If the standard upon which the concept of failure is altered to a subjective one, in contrast, a different explanation for the hidden efficacy of failure may result. A subjective interpretation of failure means that it is the appearance of failure which defines the term, regardless of what external standard is reached. Given this definition, subjective failure involves an interpretation of a particular situation or problem. In LCs, the way the group perceives their failure and the productivity that results becomes the essential issue.

The differing standards upon which failure is based also leads to variation in the way that failure is induced. In canonically-based failure, ill-structured problems are given so that there are many problem parameters, along with several other characteristics, designed to make the problem complex (Kapur, 2008). While the level of the learner or group is taken into consideration so that the problem is outside the relevant zone of proximal development, the problem itself is at the center of failure inducement. In subjective failure in LCs, in contrast, the group is at the center of failure inducement. While the complexity of the problem is still important, there are different considerations for how to induce the failure. These can include interventions that affect group cohesiveness, social norms and other aspects of group dynamics.

Methods

In this paper, we present a case study of an exemplary blended graduate learning sciences course that was developed over seven years as part of the Educational Technologies Graduate Program at the University of Haifa (UH), Israel. As part of the course (CATELT), interventions that induced subjective group failure were part of the design. We micro-genetically analyzed the discourse of members of the course to examine individual and group development, with the aim of providing fine-grained evidence of group productive subjective failure in our environment.

Findings

The second stage of CATELT had a subjective failure effect as a result of exposing students to the epistemic reality of being part of a technology-enhanced classroom learning community. A group feeling of stress manifested over the quantity (i.e., workload) and quality (i.e., type of interaction) of contributions entailed as part of such practice. This ultimately led to a group perception of failure.

There was a learner-centeredness in the design that contributed to students' experience of failure. This was based on the reflective activities, where students had to engage in a continual process, throughout the semester, to develop their own narratives about who they were as learners. This was done by having students

relate their own repertoire of previous experiences from their personal lives to the collaborative experiences they were having.

By week seven (out of thirteen), the group had shown repeated signs of tension and conflict. A string of events appeared to be a climactic turning point for the group, based on a subjective perception of failure.

Pheobe: I had enough - this topic of the group. You always present it like we are here for you [referring to another student], but it is like a school of sharks during the week, and I think also in the assignment of the week, and last week.

Pheobe's comment showed that the way the group was behaving was unacceptable to her. Her extreme metaphor of the sharks appeared to represent a climax for the group, which saw a turning point in their discourse from complaining to recognizing that they failed as a group. In the ensuing dialogue, the group explicitly discussed the fact that something was wrong in the way they were working together. This was summarized by one student:

Patricia: On Wednesday, it became clear to me that I wasn't alone - that a few others thought that there wasn't collaboration and that it is not possible to create collaboration in this way. Something else is needed.

The onset of the third stage in CATELT was marked by the group assuming responsibility over explicating and negotiating their own norms (PENN). This came in the context of the course design, which afforded this opportunity both during ftf sessions and in the online collaborative Wiki environment. The productivity that ensued resulted from their perception of failure, making the PENN an example that the subjective perception of failure in stage two was productive.

Once the group reached a perception of failure, the discourse changed to one that was focused on taking responsibility over the PENN. Two students requested to lead a special activity that was endorsed by the group and the instructors. The students broke down into small work groups, and then engaged in a PENN in the learning community. During the subsequent online interaction, the students requested the instructors to add the development of the Wiki norms page to the weekly online assignment. For the first time in the semester, the students also edited the weekly assignments page, showing they were taking responsibility over their collaborative practices. The entire group was thereafter very active in further explicating and negotiating their own norms, as well as collaborating more meaningfully.

Discussion and Conclusion

Our research is at the beginning stages of what we hope can make a contribution to the concept of productive failure. Our learning community approach, which considers subjective standards of failure, calls for a different standard upon which to define failure, a different way to induce it, and a different methodology to research the phenomenon. The idea that there could be hidden efficacy in the perception of failure by a group, and not just in failing against a conventional standard by individuals, suggests a whole host of considerations that extend the meaning of the concept and may make it more applicable to the learning community approach. We hope to extend our exploration of this group process involved in inducing failure in future CSCL research.

References

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