

Development of a Faculty Community of Practice for Scholarship of Teaching and Learning

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Abstract: Long-term sustainability of high-impact pedagogical practices following faculty development is often difficult. Thus, a multidisciplinary community of scholars, the Innovation and Design for Exploration and Analysis in Teaching Excellence (IDEATE) community, was created. The IDEATE model is grounded in learning sciences, complex conceptual systems, situated learning theory, and design-based research to enable faculty to implement transformative practices, evaluate impact, and iteratively improve learning designs. Scholars participated in interviews regarding teaching and learning, attended learning sciences workshops, generated collaborative artifacts, and developed scholarship of teaching and learning (SoTL) projects. Preliminary analysis suggests changes in practice and understanding of relevant learning theories. Design moves for the second iteration will be discussed.

Background

The purpose of this study is to develop theoretical and practical knowledge regarding the design, implementation, iteration, and impact of this innovative model for conducting Scholarship of Teaching and Learning (SoTL) through the development, support, and long-term sustainability of a community of scholars. The participants, who are also core members of the community, will engage in SoTL studies using the theoretical and methodological framework co-developed by the researchers and the community.

Methodology

This design-based research (DBR) project (Barab & Squire, 2004) involved aspects of case study, grounded theory, and complex systems analysis methodologies. As a DBR study, the primary inquiry is the efficacy of the program design over multiple iterations. The first iteration has been completed, and data analysis is currently underway. Our initial step was the creation of the Innovation and Design for Exploration and Analysis in Teaching Excellence (IDEATE) model for the development, support, and long-term sustainability of a community of practice with strong theoretical grounding and shared practices in SoTL. The first core element of the IDEATE model is grounded in situated learning theory, which defines learning as increasing identification with, and engaging in the practices of a community (Lave & Wenger, 1991). The second core element is grounded in complex conceptual systems theory, in which practices in teaching and learning are identified as emergent in conceptualizations of learning (Donaldson, 2019). The third core element is the use of Design-Based Research (DBR) methodology for all studies conducted by the community in classroom contexts (Barab & Squire, 2004; Sandoval & Bell, 2004). The fourth and final core element in the IDEATE model is the adoption of definitions of learning prominent in the learning sciences, including conceptualization of learning as: 1) construction of knowledge and artifacts, 2) as becoming, and 3) as enactive, embodied, embedded, and extended (Donaldson & Allen-Handy, 2019; Steier et al., 2019). The IDEATE model also integrates additional learning sciences theories, including identity theories, constructionist learning (Kafai, 2006), cultural-historical activity theory (Greeno & Engeström, 2014), and 4E cognition theories (Steier et al., 2019). This IDEATE model is visualized in Figure 1 in which the center squares represent the four grounding frameworks, and the outside circles represent design principles. Participants in the initial iteration of the program are 10 academic professional track (APT) faculty and one tenured faculty from various disciplines and departments at a large R1 university in the Southern United States. Before participating in the IDEATE program, community members engaged in semi-structured, in-depth interviews about their current beliefs and practices regarding teaching and learning. As research participants in this study, the community members participated in regularly scheduled, bi-weekly activities and collaborated to produce artifacts such as a community philosophy statement, vision statement, and goals statements. Also, as part of the program activities, each participant produced bi-weekly reflection papers. Semantic network analysis is being used to develop network maps of interacting and interdependent ideas in the complex conceptual systems. Prior to beginning the second iteration of the IDEATE program, data was analyzed for evidence of strengths and weaknesses in design features and the findings have been translated into design moves to inform the next iterations (Barab & Squire, 2004) of the IDEATE program as it expands into a larger group of faculty participants. This

Second phase of the IDEATE program will grow the community of scholars from the initial “core” to a larger self-sustaining community.

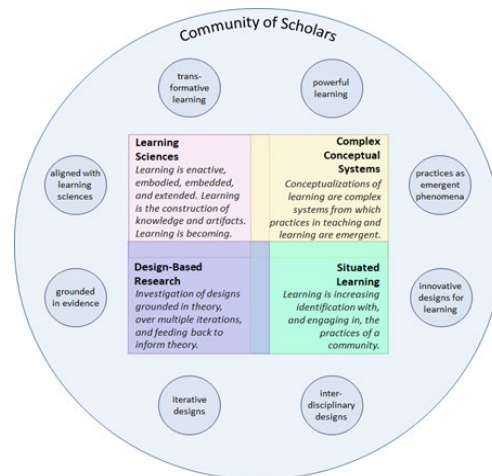


Figure 1. The IDEATE Model.

Preliminary Findings

Preliminary findings regarding the community formation suggests that conceptualizations of learning have shifted. The community was highly generative, including creation of robust community documents, and developed three fully-formed SoTL research projects and secured IRB approval. Preliminary findings have been translated into a set of design moves that are being implemented in the second iteration. The first change is in workshop scheduling. In the second iteration of this program, learning for the community (theory and research methodology) will be further integrated with practical application in ongoing SoTL research projects. Transformation of the multidisciplinary community (current form) into an interdisciplinary community is an additional goal of the second iteration. To accomplish this, we are recruiting new members to introduce ideas, technologies, or methodologies from their own disciplines to the broader IDEATE community which could potentially inform new areas of research in teaching and learning.

Significance and Discussion

The purpose of this model is to enable faculty to take charge of the implementation of innovative and transformative practices in teaching and learning in a substantive way. This study will add to knowledge regarding scholarship of teaching and learning practices, particularly in the innovative approach of developing a community of scholars around the clearly defined, evidence-based IDEATE model. This study will also provide empirical evidence regarding the impact of addressing conceptualizations of learning as complex conceptual systems from which practices in teaching and learning are emergent. Finally, SoTL projects being investigated by the core community members will result in subsequent publications that will further inform the field of SoTL.

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