

PROMISING PRACTICE

Communities of Practice in Peer Tutor Training

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ABOUT THE AUTHOR

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As learning assistance in higher education continues to grow and become more normalized, it is vital that the staff providing the services, especially peer educators such as tutors, and Supplemental Instruction leaders, among others, are adequately prepared to meet the demands of their job and provide high-quality support to students. Peer educator training should allow for expansion of knowledge and practice and provide a sense of support as they develop professionally. To maximize the impact of such training and create a better-prepared staff, it may be of interest for programs to explore the integration of social learning theory through communities of practice as part of the training curriculum.

Communities of Practice Basic Tenets

Social learning theories can be summarized as learning with and from others. For instance, communities of practice are rooted in embracing learners holistically who require meaningful contexts and interactions with others for high-yield learning to take place (Lave & Wenger, 1991; Wenger, 1999; Wenger-Trayner

et al., 2023). Rather than focusing on the internal attainment of self-contained knowledge structures and patterns, such as in many cognitivist approaches to learning, Lave and Wenger (1991) championed enriching opportunities for expanding learners' access to and active participation in the actual roles, performances, environments, etc., to facilitate transformation from novice to expert. In these authentic experiences, learners can augment their contextual growth by participating as co-learners with others who seek similar knowledge, skills, and experiences in a community of practice. This social component allows learners to share their diverse experiences and perspectives and learn from others in the group to potentially enhance members' individual skills and understanding while fostering connections between learning and performance (Lave & Wenger, 1991; Wenger, 1999; Wenger-Trayner et al., 2023).

Communities of practice are more than just groups of people (Wenger, 1999; Wenger-Trayner et al., 2023). Not every team, cohort, department, or company defines a community of practice, and not every community of practice fits a formal group term. While communities of practice can vary in formality, structure, purpose, or size, Wenger (1999) and Wenger-Trayner et al. (2023) defined three essential elements at the core of any community of practice: domain, community, and practice. *Domain* refers to a collective interest in and commitment to the respective field and a similar degree of relevant competency among its members. The *community* element focuses on building relationships between the members and serving as resources for one another. Through engagement in activities that allow for sharing experiences and resources, the community ultimately fosters a culture of collective and individual improvement, guidance, and support. The *practice* component recognizes the members of the community as active practitioners rather than hypothetical theorists. There is an expectation that shared experiences and tools will be translated into action in the field instead of just shared as passing thoughts and forgotten. For example, one might find a community of practice developing together in activities like problem solving, actively seeking out information and experiences from OERS, discerning competency gaps, and engaging in synergistic discussions (Wenger-Trayner et al., 2023). Other common hallmarks include long-term commitment from members that allows for evolutionary membership. Additionally, there is an emphasis on reflection on personal experiences as well as the genuine consideration of

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the experiences of others. Moreover, there are a consistent timeline of interactions and the actualization of continuous learning loops that build and connect over time among community members as opposed to a sequence of isolated learning events (Wenger-Trayner et al., 2023).

Community of Practice Value and Benefits

Participation in a true community of practice can have significant potential benefits for individual members, the group, or the greater field in which the community resides. For example, Wenger-Trayner et al. (2023) explained that from a short-term perspective, individual members may experience benefits such as new or stronger connections with others, resources when in need of help, opportunities for professional development and leadership, and new ideas that can be translated to their daily work. From a longer-term perspective, individual members in a community of practice might experience enhanced relevant skills, improved leadership qualities, personal or professional network expansion, and a stronger sense of identity within the field context.

The value of communities of practice does not stop at the individual level. Rather, positive impacts can be made on the community as well as the larger domain of the community. For instance, Wenger-Trayner et al. (2023) reported larger group and organizational short-term benefits like increased collective problem solving, mentorship of new members, clearer standards and procedures, and greater organizational efficiency by reducing repetition of mistakes. Over time, communities of practice can also ignite a more productive and effective culture, sharing of skills, innovations, and resources beyond the community, greater retention and recruitment to the community and field, and increased commitment of members to foster an environment where it is not necessary for a single person to be a sole expert (Wenger, 1999; Wenger-Trayner et al., 2023). Further, these theory pioneers advocated that communities of practice have the potential to breed a culture of learning and skill development, but also one of support and care for their members, where learners discover identity within the community.

Communities of Practice in Higher Education Learning Assistance

Theorists and practitioners like Wenger (1999), Wenger and Snyder (2000), and Wenger-Trayner et al. (2023) made it clear that social learning concepts

can be relevant and impactful in higher education or learning assistance contexts, and many have observed benefits across various disciplines, populations, and programs within higher education systems. For example, Johnson et al. (2021) found that implementing regional communities of practice with university STEM faculty within a domain of inquiry-based teaching resulted in increased access to and creation of shared resources, positive changes in teaching philosophies toward student learning outcome achievement, and expanded peer professional networks that allowed for both the creation of highly-valued supportive communities and momentum in reforming instruction. Similarly, Ignacio (2022) investigated the integration of social learning through explicit legitimate peripheral participation and communities of practice in a college mathematics course. Ignacio found that providing structures that allowed for both individual and collaborative involvement supported the students in achieving full participation in the content of the course, reduced barriers to students' learning, allowed for greater opportunities for constructive feedback, and provided a welcoming and productive community that students utilized to enhance their confidence and mathematical skills.

Focusing on the potential implementation of this social learning theory in higher education learning assistance environments, such as in peer tutoring and Supplemental Instruction (SI), Sutherland (2009) and Bell and Mladenovic (2015) agreed that there are opportunities to apply communities of practice to peer educator training, support, and professional development. For example, Sutherland (2009) discussed community-based learning activities used with their undergraduate tutors rooted in peer observation, yielding refinement and expansion of tutors' subject-specific pedagogical skills, especially for newer tutors with less experience, in addition to a fostering of community among the tutoring staff where they felt encouraged to share and learn from one another's experiences. Also, Bell and Mladenovic (2015) considered the fact that though they have a strong grasp of the content, student tutors, SI leaders, or other peer educators may lack complete knowledge and expertise in comparison to the instructors of the relevant courses. Thus, to support tutors in developing both their pedagogical and conceptual knowledge and skills, Bell and Mladenovic (2015) found that designing professional development opportunities that had the tutor engaging in activities with the support of university instructors and fellow tutors in the same

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content area had valuable impacts on the tutors, such as increased confidence in their abilities to serve students, a clearer sense of support and identity as a tutor in their subject, enhanced communication and interpersonal skills, and stronger relationships with the instructors and other tutors within the community.

Theory to Practice: A Peer Tutor Training Application

No training program is perfect; I am constantly in search of ways to improve the training curriculum for the tutors I supervise. This curriculum can often manifest as discussing new topics, experimenting with different formats/structures, or bringing in outside experts. I am fortunate to work in a program with a multifaceted training curriculum that allows for flexibility, differentiation, and exploration as our student and tutor populations evolve. Finding significant philosophical agreement with Sutherland (2009) and Bell and Mladenovic (2015) regarding the importance of meaningful peer educator training, support, and professional development, and seeing the benefits in my personal experiences with communities of practice, I have recently piloted integrating a content-focused community of practice with my cohort of math tutors.

Content Training in a Community of Practice

The drop-in tutoring program at James Madison University is highly valued for the tutors' content knowledge in the supported courses and subject areas. Thus, each tutor participates in monthly content training to support growth in their specific subject area(s) and to keep their minds refreshed on content they are likely to see in upcoming tutoring interactions. The respective faculty coordinator for each subject area decides the medium, topics, delivery, and structure of these content trainings each month. As the supervisor for the cohort of math tutors, I have experimented with a variety of methods in my delivery of math content training, yielding an overall wide spectrum of success. After soliciting feedback from the math tutors regarding what they felt would be most beneficial to their role and understanding the potential value of opportunities for communities of practice, I decided to pilot a math tutor community of practice as the foundation for content training in the Fall 2024 semester.

In this pilot, I utilized both asynchronous and synchronous modalities. The general format each month consisted of a set of 20–25 problems from a variety of math topics and supported courses relevant to upcoming topics and topics identified by the tutors and/or me as needing attention or strengthening. I also allowed for a “create your own” section if there was a topic a tutor individually felt the need to explore, provided they discussed it with me beforehand. I distributed the problem set at the beginning of each

month. From these given problems, each tutor chose a minimum of four problems that posed significant challenges to complete on their own time. Tutors were permitted to use any resources they deemed necessary to help them understand their chosen problems.

In the second half of each month, I held two to three synchronous workshop sessions (since getting tutors all together in one place at one time was near impossible with their schedules), which were the manifestations of our community of practice. In these sessions, the tutors brought their chosen problems and solutions to discuss their thoughts, questions, challenges, and strategies on their problems as well as ones they did not choose to attempt. The workshop sessions were fueled by the tutors' discussion with me as a co-learner rather than as a sole facilitator (though I did provide snacks!). The only “rule” for these sessions was for everyone to be an active participant. There was not a set agenda for these discussions, which allowed for greater exploration and attention to the community's unique needs. Since every tutor had the freedom to choose their own problems or topics, which were often different from others' choices, there were opportunities for greater topic coverage, active learning and collaborative problem solving, and situated learning.

Discussions typically started with each tutor sharing which problems they chose to do or which they wanted to explore further to identify similarities and differences among their choices that helped determine the direction of the discussion. The group often then compared, contrasted, or demonstrated their various approaches and techniques to check themselves, shared their successes and failures along the way, and asked questions of each other. Sometimes the group also chose to attack problems together that none of them chose to explicitly do but were still curious about. Organically, strategies for tutoring a student in a certain topic or problem came up in conversation, allowing the tutors to grow both mathematically and pedagogically. After each workshop session, I provided the tutors with a complete solution manual to the problem set, instilling the expectation that they examine the solutions and continue asking questions and conversing with each other moving forward.

Was this really a community of practice or just a bunch of students with the same job title talking about math and eating snacks? All the essential elements of a community of practice outlined in Wenger (1999) and Wenger-Trayner et al. (2023) were present in this pilot. The community members (i.e., the math tutors and I) clearly had a shared domain of mathematics topics in our supported courses in terms of competence and commitment to expanding our understandings and tutoring practices. The workshop sessions provided the infrastructure for the community element because they allowed the tutors to engage in discussion, share

their experiences and thought processes, and support and guide each other in their individual growth. Thus, the results of these synchronous sessions were not just enhanced content knowledge but also fostered stronger relationships among the group. Lastly, the practice element was present because the active learning that took place in the sessions was designed to be translated into practice when they faced the same topics and questions when tutoring during shifts. Their shared experiences, tools, and strategies were not confined to that one workshop session, but rather they served as a catalyst for integration in practice.

This structure also embodied several other common characteristics of communities of practice, such as collaborative problem solving, seeking out the experiences and expertise of others, individual and collective reflection, identifying and addressing competence gaps, synergistic discussions, and gains in confidence. Additionally, since this was the structure used each month for their content training throughout the semester, the tutors had a consistent and long-term commitment to the community, allowing for those crucial continuous learning loops. It was also flexible enough so that new tutors could be easily integrated into the community of practice to support evolving membership and holistic growth for the entire cohort.

Perceived Benefits and Struggles

Overall, I plan to continue nurturing this community of practice among the math tutors as the perceived benefits greatly outweighed the downsides. First, the tutors have explicitly shared their feedback with me that the aspects they like most about this format are the dual asynchronous and synchronous nature to allow them to engage with the content through both independent and collaborative thinking time, the opportunity to see how their peers approach different problems or topics, the greater scope of content able to be covered and having choice in that scope, and the active learning through community discussions that help bolster both their content knowledge and co-tutor relationships. Some have also shared that participating in this community of practice helped them to realize the value of collaboration in their work because they felt they were able to develop a deeper understanding of the content by considering multiple perspectives and expand their tutoring practices based on others' experiences. All also expressed a perceived boost in self-confidence in their content knowledge and their abilities to support students regarding similar problems and topics. They enjoyed

this structure because they found it beneficial to their professional development while also getting to build community, and they were eager to continue growing as a community of practice in future semesters. The only downside the tutors shared was that sometimes the scheduling options were not ideal, but this is a logistics concern that is somewhat inevitable when trying to find suitable days/times for several busy college students to get together.

Anecdotally, as their supervisor, I have made many positive observations in the math tutors' work that I attribute largely to the community of practice content training scheme. Most notably has been their collective expansion of content knowledge. There have been significantly fewer instances when tutors need to seek me out for content assistance when working with a student, as they have developed an adequate knowledge base of topics and confidence in their abilities surrounding those topics. I have seen many of my tutors who often exhibited lower levels of confidence in their content knowledge grow tremendously as their words, behaviors, and actions exude greater composure, assurance, and self-awareness than ever before. The tutors all achieved satisfactory and/or excellent results in the content-related portions of the tutor evaluation protocol, and students using our services consistently report in surveys that the tutors they work with are knowledgeable in their subject area and explain the content well. Also, I have witnessed greater collaboration among the math tutors during their shifts to support each other, both from a mathematical perspective and a human/co-worker perspective, when feeling stumped by a student's question. By helping each

other and the student, this personifies the valuable notion of a communal memory in communities of practice in that not every single tutor needs to know every single thing, but instead, as a whole, the community of tutors can get the job done by pooling their knowledge. Many of my tutors also went beyond the minimum required problems to explore additional topics, demonstrating a much deeper commitment to their professional development than I had seen in previous training formats.

Another outcome is that the community of practice is not confined to those workshop sessions each month. Rather, I often overhear the tutors talking about the problems or topics from the month's training in the days and weeks leading up to the synchronous sessions, and their discussions from the workshop sessions extend beyond our scheduled time together. As

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these ongoing conversations help the tutors make connections among topics, they also naturally foster their identification of other topics they want to explore further in content training to improve their understanding, which informs me of topics to consider for the next problem set so that content training can be as applicable and relevant to the tutors as possible.

Aside from the mathematical growth of my cohort of tutors, one of the greatest benefits from integrating this community of practice structure in training has been the blossoming of the relationships among the tutors. This community structure provided the time and space for the tutors to also get to know each other and engage as fellow students, classmates, co-workers, and friends. In their daily interactions with each other, I can see how they have become more comfortable around each other and how they support each other outside of the tutoring center. While rare, I sometimes hire new tutors in the middle of a semester, and this community of practice structure allows for more frequent and targeted opportunities to get the new tutors integrated into the team, which overall helps the new tutors transition into their role comfortably and with a village of support.

The only downsides I uncovered were in terms of initial time commitment and scheduling. It did take substantial time in the initial planning stage to figure out the logistics and to create materials each month. Scheduling the monthly synchronous sessions were also a challenge because the tutors have their classes and other extra-curricular commitments. If it was absolutely impossible for a tutor to attend one of the workshop sessions, I made sure to discuss an individual alternative plan with that tutor so that they still had some form of meaningful content training.

Final Thoughts

The community of practice concept has been utilized in society for several years, both formally and informally (Lave & Wenger, 1991; Wenger, 1999; Wenger & Snyder, 2000; Wenger-Trayner et al., 2023). Though my application of these concepts with my cohort of math tutors was not perfect, the benefits far outweighed the costs, and the positive outcomes demonstrated the effectiveness of such a structure. I encourage professionals in all fields, but especially those in learning assistance, to be willing to learn about and experiment with the application of various learning theories in practice, to share their experiences with others, and to consider how communities of practice specifically could manifest in their work.

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