GROUP SHARING, NETWORKING, AND PROBLEM SOLVING THROUGH A COMMUNITY OF PRACTICE

By: Ann Beheler and Mark Dempsey
January 2020
Volume: 33 **Number:** 1
Leadership Abstracts

Tags: [Leadership and Organization](), [Learning and Organization](), [Leadership Development](), [Organizational Culture]()

A good illustration of the value of communities of practice (CoPs) involves a group of passionate Xerox repairmen in the 1990s who spent their lunches discussing lessons learned from their time in the field working on machines and dealing with customers (Hoadley 2011). What might appear to be the sharing of amusing war stories was, in fact, a method for joint problem solving. The repairmen realized that, collectively, they could teach each other far more about Xerox repair and customer service than a printed manual ever could. That shared know-how improved their professional ability and outpaced institutional training.

CoPs, as defined by Wenger and Snyder (2000), are "groups of people informally bound together by shared expertise and passion for a joint enterprise" (para. 2). CoPs are common in industry, as they are often designed to cross institutional silos and solve multidisciplinary problems. But unlike work

groups or project teams that are assembled with formal hierarchies and mandated deliverables to service a clear goal, CoPs are more informal and exist to boost members' capabilities and sharpen their expertise.

Since 2012, the National Convergence Technology Center (CTC)—funded by a National Science Foundation (NSF) grant through the Advanced Technological Education (ATE) program and based at Collin College in North Texas—has successfully applied this CoP concept to technical education. The CTC manages a CoP, consisting of 74 colleges across 28 states, called the Convergence College Network (CCN). This group of IT educators meet regularly to share resources, trade best practices, and problem solve as a group. A robust CoP like this has proven especially useful in a field like IT, where industry trends and job skills change so quickly. Because so many cutting-edge industries are likewise always evolving, this CoP approach can work for other technical disciplines.

Like most CoPs, the CCN evolved organically. To support IT networking education with free curriculum, faculty training, and employer guidance, in 2004 the CTC's NSF ATE Regional Center grant tried to deliver content in a one-size-fits-all box. Once staff realized that every college has unique needs, the strategy was adjusted; the CTC took on more of a mentorship role, customizing support to each college. As the CTC grew, however, it became untenable for a handful of grant staff members to support so many colleges. A shared mentorship approach—called the Mentored College Network—emerged in 2009, allowing the more mature partner colleges to take on a larger role in supporting the other colleges. The Mentored College Network was renamed the CCN in 2012 with the awarding of an NSF ATE National Center grant. One of the keys to the CCN is the understanding that no one college or faculty member can know everything about curriculum, classroom tools, or industry trends. But, just like that group of Xerox repairmen, more than likely, everyone in the CoP knows something that might benefit others.

The CTC primarily manages and organizes know-how sharing for the CCN by arranging and hosting regular meetings. Meeting content is often provided by the CCN members (e.g., volunteers share a resource or unique expertise) and usually features open discussions about a specific topic, allowing any member to raise questions, describe problems, or offer solutions. Three times a year, the CCN meets via a Web meeting for ninety minutes. At least once a year—typically in conjunction with Working Connections, a five-day professional development event hosted in Texas each July that many CCN members already attend—the CCN meets in person for four hours.

CCN In-Person Workshop Meeting (July 2018)

In addition to these quarterly CCN meetings, the CTC also manages two separate 60-minute Web meetings each year intended for administrators in the CCN community. Because most of the CCN membership is faculty, these special administrator meetings focus on issues and challenges that face college leadership.

Curious about how well the CCN adheres to formal studies of CoPs, CTC staff looked at Gilbert Probst and Stefano Borzillo's 2008 study of 57 corporate CoPs that identified ten "commandments" of successful communities of practice. Although many commandments stem from the needs of large organizations with CoPs spanning many divisions and departments, the CTC was pleased to discover that the CCN follows the spirit of these guidelines:

1. **Stick to strategic objectives.** It is important that a CoP have a focused mission that provides obvious value to its members. For the CCN, the goal is clear: Strengthen IT programs and deliver to students an up-to-date IT curriculum. Indeed, one of the biggest factors to maintaining a thriving community is making sure that membership understands the benefits of participation. If members don't find the community useful or meaningful, they will drop out and the community will collapse.
2. **Divide objectives into subtopics.** The suggestion here is that successful communities of practice break down the big overall goal into smaller, more management sub-goals. The CTC follows this approach through practices such as providing to the CCN discrete, special topic webinars and hosting separate sub-meetings for administrators.
3. **Employ a governance committee.** A governance committee monitors the activity and progress of the CoP and strategizes ways to maximize impact. In big companies, this often means making sure that the C-suite leaders appreciate the value and impact of the CoP so it will be allowed to continue. The CTC uses its group of eight grant partner colleges—many of which were among the first members of the CCN many years ago—to guide the CCN community. The grant's National Visiting Committee that meets once a year to evaluate the grant also provides strategic suggestions on getting the most out of the group.
4. **Assign a best practice control agent.** This person makes sure the CoP is delivering results in a timely manner and that the best practices are, in fact, useful. The CTC staff fills this role for the CCN by hosting meetings and webinars and helping to steer content. In other words, the CTC provides the infrastructure and calendar slots which the CCN fills with its content.
5. **Feed the CoP with external expertise.** Bringing in outside voices can create excitement in a CoP by introducing new perspectives and expertise. The CTC regularly arranges presentations by experts outside of the CCN community, most often at the annual CCN in-person meetings. Recent guest expert presentations and workshops included training on how to introduce team-based learning into the classroom and how to write persuasive reports for administrators.
6. **Promote access to other networks.** Connecting a CoP to other networks boosts members' expertise as they adopt best practices of those outside groups, and CCN member colleges get connected to a number of outside networks. For one,

the CCN gets invited to quarterly meetings with the CTC's Business and Industry Leadership Team (BILT), the group of employers that advises the CTC on workplace trends, job forecasts, and entry-level skills. Two, because the CTC provides partial travel reimbursement to select national education conferences, those events provide access to other networks of educators and experts. And three, because the CTC is funded by the NSF ATE program, CCN member colleges have access to the unique NSF ATE network of innovative college programs.

7. **The leader must be a driver and promoter.** Without question, a CoP needs a visionary leader to encourage participation and to publicize the value of the group's work. For the CCN, the leader is the CTC grant Principal Investigator, Ann Beheler, an experienced educator and IT executive who always finds ways to tout the accomplishments of the CCN.

8. **Overcome hierarchy-related pressures.** Cultivating a safe, risk-free atmosphere is essential for corporate CoPs where criticism or errors—both essential to the CoP process—might put jobs in jeopardy. Candidly expressing frustration about classroom and administrative challenges during group discussions isn't typically a problem for CCN members. Even so, the CTC strives to include all of the CCN members' many perspectives and opinions. Within reason, there are no foolish questions or off-limit topics.

9. **Provide measurable performance.** Corporate CoPs can sometimes show value by delivering cost reductions or revenue increases. But even then, it can be hard to demonstrate the impact of CoPs because of their decentralized structure. Not only can it take time to see results, it's not always easy to draw a clear line between a result and the influence of the CoP (Wenger & Snyder, 2000). For this reason, the CTC has found that the best way to identify impact is to ask CCN members each year to describe ways that the CCN has benefited their program.

10. **Illustrate results for CoP members.** Because it is important for CoP members to appreciate the value of the group, the CTC regularly spends time at CCN meetings to offer concrete evidence of impact. One other important tool to show the ongoing value of the group is the wiki repository maintained by the CTC. Meeting minutes, webinar presentations, resources, and best practices all go into the resource wiki. This material isn't just content created by the grant; it's open for content created by any CCN member college.

The CCN CoP is unique in that, because of the grant, CCN member colleges can request reimbursement for select travel expenses to professional development events. In a frequent-flyer approach, schools that provide more engagement and participation receive more benefits and perks, most notably higher caps on travel expense reimbursements. In contrast, the Mentored College Network had no participation levels; all CoP members received the same level of travel reimbursement help for special events like Working Connections.

Deciding what CCN member college would be in which level was at first a purely subjective decision. Guided by the grant partners' objection to the idea of everyone getting the same travel help no matter the level of participation, the CTC decided in spring 2013 to create a points system to better measure CCN engagement and allow for a more objective process to assign levels. Schools that

wished to be classified as Level 1 and get more benefits had to deliver certain required elements that aligned with the grant goals (i.e., host two business meetings a year, conduct a job skills vote, submit a detailed annual report), plus score a certain number of points based on CCN meeting attendance and other essential activities within their home program. As shown in Chart 1 below, introducing the points system has had a clear impact on attendance levels at the CTC's quarterly BILT meetings. Further, starting in July 2013, travel reimbursement caps for Working Connections were divided between Level 1 (a higher cap) and Level 2 (a lower cap).

Chart 1: Impact of the Points System on BILT Meeting Attendance
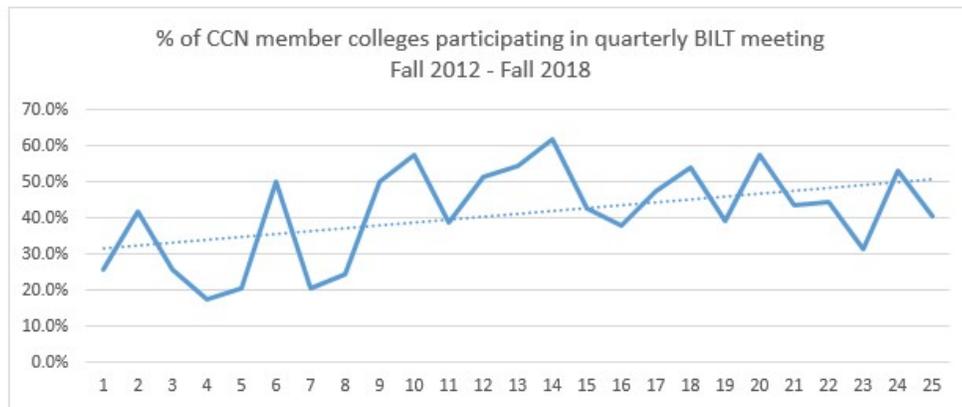
So, what can you do to start your own CoP? First, decide on your purpose. How can a CoP help you achieve your organizational goals? Once you have an idea of the mission, then you can determine if there might be an interest among potential members. Explain the possible value of the group to administration and ask for support—at the very least you will need an infrastructure, such as a meeting platform like Zoom or a physical room, to facilitate meetings. Administration can also provide legitimacy to your efforts. From there, create a system for communication, develop a way to store and manage the group's output, and invite outside experts to augment the group. Then, sit back and see what happens. If the members of the CoP find value in membership, they will stay engaged and recruit others to join. Note the unique way Wenger and Snyder (2000) likened CoPs to a garden: While "informal and self-organizing," they "benefit from cultivation" (para. 24).

References

Hoadley, C. (2011). What is a community of practice and how can we support it? *In S. Land & D. H. Jonassen (Eds.), Theoretical foundations of learning environments (pp. 287-300).* Retrieved from www.semanticscholar.org/paper/What-is-a-Community-of-Practice-and-How-Can-We-It-Hoadley/50d5f7ef66a9471c06ca45778b2dc624b20550d8

Probst. G., & Borzillo, S. (2008). Why communities of practice succeed and why they fail. *European Management Journal*. Retrieved from www.sciencedirect.com/science/article/pii/S0263237308000479

Wenger, E., & Snyder, W. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*. Retrieved from hbr.org/2000/01/communities-of-practice-the-organizational-frontier

Dr. Ann Beheler is Principal Investigator, National Convergence Technology Center, and Executive Director, Emerging Technology Grants, and Mark Dempsey is Assistant Director, National Convergence Technology Center, at Collin College in McKinney, Texas.

https://www.league.org/leadership-abstracts/group-sharing-networking-and-problem-solving-through-community-practice