



EFFECTIVE VIRTUAL PLCS

November 2020

INTRODUCTION

For much of the 21st-century, K-12 practitioners have promoted professional learning communities (PLCs) as a viable and effective way for educators “to develop lesson plans, examine student work, monitor student progress, assess the effectiveness of instruction, and identify their professional learning needs” as members of a collaborative team.¹ If implemented correctly, PLCs allow teachers increased opportunities to refine their pedagogies, adapt instruction to best meet students’ needs, and reflect on the impacts of their work.² While PLCs are often conducted in person, site closures due to COVID-19 have led districts to conduct PLCs virtually. As districts conduct virtual PLCs, district leaders seek to understand their effectiveness as well as strategies for implementation and overcoming challenges.

To support member districts, Hanover Research (Hanover) presents this executive summary and an accompanying annotated bibliography on virtual PLCs.

METHODOLOGY

Hanover leveraged databases such as EBSCO and Google Scholar as well as targeted web searches to identify and scan recent and reliable sources for this report. Sources from the past five years were the primary focus, but sources from the past 10 years are included when particularly relevant or comprehensive. Additionally, Hanover excluded sources that discuss online professional development in general and sources that only describe in-person PLCs. The final list of sources includes journal articles that discuss empirical research, education magazine publications, education blog posts, and other materials.

Following source identification, Hanover compiled virtual PLC sources into an annotated bibliography with source details; brief descriptions of source information on virtual PLC effectiveness, strategies, and challenges; and summaries of each source. The annotated bibliography also includes links to sources where possible; however, some sources are not publicly available and therefore cannot be directly linked.

After collecting virtual PLC information into the annotated bibliography, Hanover synthesized research into the recommendations and key findings on the following pages. These sections discuss the effectiveness of virtual PLCs, implementation strategies for success, and the challenges of virtual PLCs.

For information on general virtual professional development, please review the Hanover reports below on the Hanover Digital Portal.

[Best Practices in Online Professional Learning](#)







[Delivering Online Professional Development](#)

¹ Blitz, C.L. and R. Schulman. “Measurement Instruments or Assessing the Performance of Professional Learning Communities.” p. 1. <https://files.eric.ed.gov/fulltext/ED568594.pdf>

² [1] “Learning Communities.” Learning Forward. <https://learningforward.org/standards/learning-communities/> [2] DuFour, R. “What Is a Professional Learning Community?” ASCD, May 2004. <http://www.ascd.org/publications/educational-leadership/may04/vol61/num08/What-Is-a-Professional-Learning-Community%C2%A2.aspx>

RECOMMENDATIONS

Based on our findings, Hanover recommends that districts:

-  **Focus district-level supports for virtual PLCs on developing strong facilitators.** PLC participants may be more distracted and less engaged in a virtual setting and may also experience barriers to participation such as technology and connectivity. A strong facilitator should be able to either personally support participants in troubleshooting issues with devices and online platforms or be able to connect participants with appropriate support staff. A strong facilitator should also be able to set clear goals and expectations for the virtual PLC and be able to modify protocols and practices for an online setting.
-  **Identify a platform for PLCs that allows for synchronous and asynchronous engagement, and provide training and technical assistance related to platform use.** Video meetings, like in-person meetings, build trust and rapport among participants and lead to improved collaboration and idea-sharing. Asynchronous resource sharing and discussion boards are also valuable to virtual PLC participants in that they allow for collaboration at the convenience of the participants.
-  **Leverage virtual PLCs to address teachers' challenges related to the pandemic, such as online and hybrid learning as well as wellbeing and self-care.** PLCs are effective in improving teaching and learning as well as teachers' self-efficacy, sense of connectedness, and feeling of fulfillment. Through goal and agenda setting, virtual PLCs can be used to effectively address a variety of concerns and challenges related to COVID-19.
-  **Leverage virtual PLCs to connect staff members who may not have had the opportunity to collaborate in traditional PLCs.** Consider connecting staff vertically or horizontally across school and district structures, or allowing staff to choose virtual PLC participation based on personal goals and needs.
-  **When possible, still provide time for in-person PLC interactions, particularly at the beginning of PLC implementation.** Schedule an annual virtual PLC orientation during the summer or early fall before virtual PLCs begin to allow communities to meet in person, discuss PLC goals and structures, and become comfortable with the technology they plan to use throughout the year.
-  **Gather feedback from virtual PLC participants to understand the strengths and challenges specific to the district's virtual PLC implementation.** In this way, districts can identify both short- and long-term needs of its PLC participants and explore the value of continuing virtual PLCs after all staff return in-person.

KEY FINDINGS: EFFECTIVENESS



Virtual PLCs offer an effective alternative to collaborative professional learning when physical distance, safety concerns, schedules, or other factors prevent in-person PLCs. Groups that transition to virtual PLCs appear to gain similar benefits to groups that meet in person, such as a sense of community, content and pedagogical knowledge, and access to resources. Nonetheless, virtual PLCs may offer fewer opportunities for socialization and may not be as motivating as compared to in-person PLCs.



Participating in virtual PLCs appears to support increased feelings of connectedness and fosters a sense of community. As shown by the Georgia Department of Education's infographic on virtual PLCs, one of the expectations of virtual PLCs is that they "create a supportive environment that is built on respect and trust."³ Teacher surveys, interviews, focus groups, and other research demonstrate improved trust and sense of fulfillment due to supportive PLC environments. Additionally, effectively building a strong sense of community supports other aspects of PLCs, such as the frequency of interactions, networking, and confidence in contributing to PLC discussions. Furthermore, researchers often find that beginning virtual PLCs with an in-person institute or conference, where participants can meet face-to-face, allows participants to build connections and trusting relationships more quickly.



Virtual PLCs successfully promote knowledge sharing and expand participants' repertoire of instructional practices. Whether participants have the same or diverse professional roles and responsibilities, virtual PLCs allow participants to share ideas, successful practices, and experiences from which others can learn. For example, certain virtual PLCs involve teachers videotaping themselves while instructing and uploading videos to the virtual PLC platform. This activity allows teachers to demonstrate successes and challenges, share content or teacher strategies, and obtain feedback. Additionally, effective virtual PLCs allow participants to share and archive various resources to gain information during sessions or at their convenience. Recommendations when sharing resources include prioritizing visuals and brief videos and posting regularly to maintain engagement.



Virtual PLCs may improve teacher self-efficacy and therefore student performance. According to feedback in multiple qualitative studies, relationship building and knowledge sharing increase teachers' confidence and feelings of success. Additionally, because virtual PLCs expand upon and improve participants' instructional practices, student outcomes and perceptions of learning may also improve. Furthermore, during unprecedented school closures and complex reopening plans, virtual PLCs provide teachers with outlets for explaining challenges and sharing resources that lead to successful solutions.



Platforms that allow virtual PLCs to mimic in-person collaboration demonstrate greater effectiveness than platforms that do not. Examples of useful platform elements include audio and video capabilities, document sharing spaces, and informal conversation opportunities. For example, one virtual PLC tested five virtual platforms to determine how best to conduct virtual meetings, and it found using a platform that offers multiple tools and features (e.g., video conferencing and screen sharing) results in the most productive and collaborative meetings. Additionally, for PLCs with an asynchronous format, discussion boards enable direct information and resource sharing, and for all virtual PLCs, opportunities for informal conversations foster a sense of community in a virtual setting that in-person PLCs experience naturally (e.g., during a lunch meeting).

³"Virtual Professional Learning Communities (PLCs)." Georgia Department of Education. <https://www.gadoe.org/School-Improvement/Teacher-and-Leader-Effectiveness/Documents/Professional%20Learning%20Documents%202019-2020/GaDOE%20Virtual%20PLC%20Guidance.pdf>

KEY FINDINGS: IMPLEMENTATION



Synchronous, asynchronous, or a combination of both approaches may provide an effective strategy for conducting virtual PLCs. Recent publications reference each virtual learning style, and although in-person PLCs appear to be the preferred mode of engagement, synchronous and asynchronous styles also provide benefits. For example, synchronous videoconferences and activities more closely align with in-person meetings and strongly support a sense of community. Alternatively, asynchronous discussion boards, personalized platform profiles, and resource archives support members with varying schedules, provide opportunities for learning about others, and may lead to a more relaxed environment.



Successful virtual PLCs often begin with an in-person orientation or institute that enables participants to meet and prepare for professional learning in a virtual setting. These in-person opportunities allow participants to connect and start building relationships before engaging in virtual conversations, reflections, and activities. An initial in-person session also allows for hands-on technology support and opportunities to set expectations and goals in advance.



Virtual PLC participants and facilitators must collaborate to set clear goals, expectations, protocols. Virtual PLC goals reflect participants' and institutions' needs and interests and allow meetings and activities to be more personal and focused. Additionally, establishing expectations and protocols early in a virtual PLC prevents potential communication and engagement problems while ensuring that meetings are valuable. Protocols may describe how participants conduct discussions, offer feedback, or address issues, and may need to be modified for a virtual setting.



Leverage strong facilitators to sustain discussions, ensure participation, enforce protocols, and help troubleshoot technology challenges. Facilitators do not lecture or lead training sessions during meetings but may select topics and guide PLC activities to avoid gaps in interactions and engagement barriers. These group members may share resources or reply to participants' discussion posts to initiate involvement and knowledge-sharing. Additionally, facilitators must understand participants' needs and interests to promote interactions and effective professional learning opportunities while also understanding virtual PLC platforms and tools to support participants with limited technology skills.

KEY FINDINGS: CHALLENGES



Challenges regarding technology consistently appear in virtual PLC literature and publications, and solutions include preventative measures, troubleshooting efforts, and patience. Virtual PLCs may prevent technology challenges by conducting orientations that discuss virtual platforms and tools and provide hands-on support before meetings begin. Additionally, technology challenges such as difficulty logging in or using a platform feature may occur mid-meeting. Suggested solutions include: ensuring that facilitators understand all virtual PLC tools; and providing contact information for the district's or platform company's technology support specialists. Furthermore, certain virtual PLC participants overcome technology challenges and discomfort through practice and their colleagues' support. As highlighted in a report on the Project TEACH online PLC, one teacher reflects:⁴

"I was so nervous about this class at first because I have so much trouble with the technology. I contemplated dropping at first. After all the support from the instructor and other students, I realized that this was a great way to learn and expand my thinking on these issues. We are all so busy, without the online component, we would have interacted less, and therefore not gotten as much from the experience. Thank you for this experience."



Virtual PLCs may suffer from a lack of interaction and engagement as compared to in-person PLCs, and facilitators play a key role in preventing and discouraging silence. Reasons such as nerves, busy schedules, and at-home distractions factor into why participants may not regularly contribute or engage in virtual PLCs. However, groups may promote engagement and interactions by building trusting relationships and having a strong facilitator to guide meetings and activities. According to a publication by the Michigan Virtual Learning Research Institute, virtual PLC facilitators "may consider how to incorporate more structure and facilitation that would generate deeper connections, more sharing of specific support strategies, and analysis of student or professional learning artifacts, that would create a richer learning environment."⁵



Virtual PLC participants may have different interests, needs, and goals for virtual PLCs. Although diverse roles and perspectives support knowledge sharing and "cross-pollination," working in different settings and contexts may lead to confusion, misunderstandings, or a lack of focus.⁶ Strategies to overcome challenges regarding contrasting needs include employing a strong facilitator, establishing goals and expectations early, and clarifying connections between PLC discussions and practice.



Research on virtual PLCs remains inconclusive regarding the impact of virtual PLCs on student outcomes and the long-term effectiveness of virtual PLCs. Although certain studies indicate that student performance increases and student anxiety decreases following teacher participation in virtual PLCs, such evidence is limited. Additionally, Hanover's scan of recent publications on virtual PLCs did not reveal longitudinal studies that indicate which strategies demonstrate effectiveness over time or how ongoing participation in virtual PLCs impacts participant outcomes.

⁴ Block quote reproduced verbatim from: Salazar, D. et al. "On-Line Professional Learning Communities: Increasing Teacher Learning and Productivity in Isolated Rural Communities." *Systemics, Cybernetics and Informatics*, 8:4, 2010. p. 5.
[http://www.iiisci.org/journal/cv\\$/sci/pdfs/ge220yx.pdf](http://www.iiisci.org/journal/cv$/sci/pdfs/ge220yx.pdf)

⁵ Kwon, J.B., K. Dirkin, and J. Bruno. "Engagement and Discourse of Educators through Online Professional Learning Communities." Michigan Virtual Learning Research Institute, September 26, 2018.
<https://michiganvirtual.org/research/publications/engagement-and-discourse-of-educators-through-online-professional-learning-communities/>

⁶ Katz, M.-L. et al. "Traveling With Integrity: Translating Face-to-Face Teacher Professional Learning to Online and Blended Spaces." *Journal of Adolescent & Adult Literacy*, 63:2, 2019. p. 222. Retrieved from https://padlet-uploads.storage.googleapis.com/376459439/f21d6d7e7040ffb3c1332302137265/Katz_Stump_Charney_Sirott_Howlett_JAAL_2019_1_.pdf

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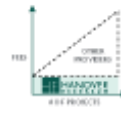
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