



What Is a Professional Learning Community?

Professional Learning Communities (PLCs) have been integral in education, fostering collaboration among educators and administration to improve teaching practices and student outcomes (DuFour & Eaker, 1998; DuFour et al., 2008; Hord et al., 2010; Roy & Hord, 2006). A PLC is defined as a group of committed educators engaged in continuous inquiry to bring about positive changes in student learning. Implementing a PLC is shown to be effective in enhancing teaching pedagogy and overall student learning through research-based practices (Anderson & Olivier, 2022; Goode et al., 2020). According to DuFour et al. (2021), a PLC should be:

1. **Focused on learning**
2. **Structured around a collaborative culture and collective responsibility**
3. **Results-oriented**

As educational standards evolve, PLCs should continue to adapt, emphasizing shared leadership, collaboration, and celebration (DuFour et al., 2018; DuFour et al., 2021). Fundamental principles, such as ongoing learning, collective responsibility, and data-driven adjustments to teaching practices, are crucial for a successful PLC (DuFour et al., 2021).



“A PLC should contain groups from multiple content areas working together and interpreting data for whole-school solutions.”

(Goode, et al., 2020; Verdi, 2022; Krasniqi, 2020)

Improving student outcomes requires serious commitment. Because of this, decisions made within PLCs must be intentional, goal-oriented, and reflective. Despite the challenges, when properly supported and focused on a shared goal through the use of inquiry practices, PLCs can lead to long-term benefits for the entire school community.

Evidence of Impact

Recent research shows how PLCs benefit school climate and student outcomes (Anderson & Oliver, 2022; Goode et al., 2020; Bergeron 2020; Verdi, 2022; Lasater et al., 2021). PLCs are traditionally a vehicle for teachers' professional learning (Anderson & Oliver, 2022; Louis & Marks, 1998). However, in the past five years, more PLCs have engaged in the shared process of inquiry and discourse, resulting in educators learning with and from their PLC colleagues rather than through formal professional development. This shift represents growth, as a schoolwide PLC that collaborates around shared goals and participates in data-driven decision-making positively influences teacher self-efficacy, and this subsequently improves student learning outcomes (Ebbeler et al., 2017; Kippers et al., 2018; Schildkamp, 2019; Schildkamp et al., 2019; Anderson & Oliver, 2022; Goode et al., 2020).

Research increasingly confirms that trust and collaboration are necessary to support student learning within PLCs. Trust fosters an environment where teachers can openly share practices and vulnerabilities, leading to improved collaboration, a more comprehensive understanding of students' learning needs,





and ultimately a more effective PLC process (Bergeron, 2020; Verdi, 2022). These factors are critical to the foundation of productive inquiry and discourse because they create a safe environment among teachers, facilitate unbiased student assessment, and foster shared ownership of student learning (Bergeron, 2020; Verdi, 2022; Ermeling, 2010; Goode et al., 2020; Lasater et al., 2020; Laster et al., 2021; Marsh 2012; Schildkamp et al., 2019).

Implications for Practice

When implemented effectively, PLCs facilitate discussions around data as a vehicle for pooling resources around positive growth in school culture, teacher learning, and student success (Mandinach & Schildkamp, 2021; Ni et al., 2023; Verdi, 2022).

Leadership Practices

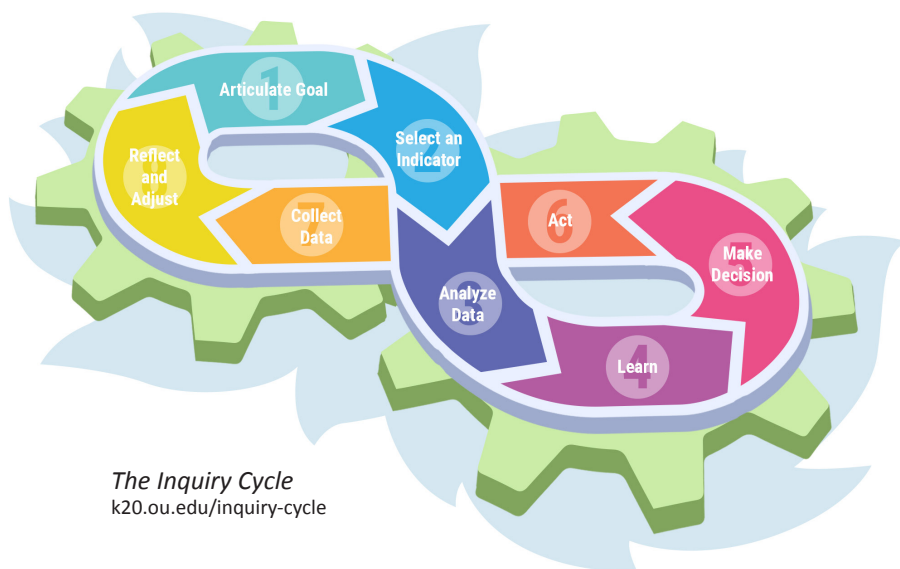
School leaders play a critical role in establishing the necessary elements for a PLC to thrive. Establishing a solid and predictable meeting structure—including time, location, and group members for example—increases collaboration and positive professional conversations; this, in turn, engenders trust and benefits students, teachers, and overall school culture (Azeska et al., 2017; Darrow, 2016; Parham et al., 2020; Park & Datnow, 2009; Peterson et al., 2012; Hargreaves & O'Connor, 2018; Schildkamp et al., 2019). The following leadership practices support healthy PLCs:

- Craft a systematic plan for providing protected, regular, and expected time for PLCs within the school day (Goode et al., 2020; Riggins & Knowles, 2020; Dufour et al., 2021; Eaker & Marzano, 2020).
- Provide time during PLC meetings to focus on setting goals and completing tasks in order to sustain continuous cycles of improvement (Riggins & Knowles, 2020; Bergeron, 2020; Ni et al., 2023; Woodland, 2016).
- Model leadership roles to develop teacher leaders who participate in mentoring, guiding discussions, and building community (Ni et al., 2023).
- Facilitate relationships for coaching, feedback, and reflection through clearly defined roles and expectations (Darling-Hammond et al., 2017; Ni et al., 2023; Baharav & Newman, 2019; Parham et al., 2020).
- Encourage active learning and collaboration around curriculum design, shared assessments of expectations by content area, and continuous measurement of student progress across classes and grade levels (Riggins & Knowles, 2020; Bergeron, 2020; Espin et al., 2021; Mandinach & Schildkamp, 2021).
- Communicate a PLC's focus and goals clearly in staff meetings and professional development, and emphasize a nonjudgmental, improvement-oriented focus rather than accountability for test scores or school report cards (Mandinach & Schildkamp, 2021; Datnow & Hubbard, 2015; Hoogland et al., 2016; Murray, 2014; Schildkamp, 2019; Schildkamp et al., 2019).
- Provide common goals, roles, and responsibilities to help teachers feel comfortable engaging in the collaborative process (Lyon et al., 2022; Torres et al., 2020).
- Promote a shared group vision for success, including the belief that all children can learn and succeed, while also fostering a sense of ownership among staff through a shared commitment to goals and inclusivity (Riggins & Knowles, 2020; Krasniqi, 2020).



Inquiry Practices

The Inquiry Cycle is an iterative process where educators—guided by data— develop solutions for school improvement. Teachers guided by the Inquiry Cycle are always trying new things and adjusting practices in a holistic way. This cycle helps teachers use data to tackle local problems or questions through a systematic series of steps that include gathering data, studying that data, figuring out what it means, making choices, and taking action (Baharav & Newman, 2019). Positive data culture, data-driven



decision-making (DDDM), and research practice partnerships must be in place to make PLCs work. PLCs can engage in the following practices towards holistic inquiry:

- Use guiding questions to focus discussion on what students need to learn, how learning will be assessed, actions to be taken if students do not learn, and strategies for students who have already mastered the content (Riggins & Knowles, 2020).
- Provide PD focused on data literacy and cultural competency to ensure student success is not determined by demographics (National Equity Project; Deluca et al., 2018; Dunn et al., 2013; Oslund et al., 2021).
- Practice collaborative data analysis between leaders and teachers to focus on observable and measurable outcomes, and provide an educational environment that meets the needs of all students, irrespective of their backgrounds (Ling & Nasri, 2019).
- Maintain high expectations, foster positive leadership, and offer student-centered accessible learning with culturally responsive teaching and differentiated instruction (Ainscow, 2020; Fletcher et al., 2019; Leithwood, 2021; Marcos et al., 2021; Nadelson et al., 2019; Onyishi & Sefotho, 2021).
- Set goals and consider the necessary data to assess the impact on student learning (Verdi, 2022).
- Look beyond traditional achievement scores and analyze various types of assessments—both formal and informal—as well as qualitative and quantitative performance data to gain a comprehensive understanding of each student (Lai & Schildkamp, 2013; Mandinach & Gummer, 2016; Mandinach & Schildkamp, 2021).

Conclusion

Teachers who learn more effectively become, in turn, better teachers to their students. Moreover, leadership support for teacher growth—especially the effective implementation of PLCs—helps turn teachers into leaders. Using data structures effectively is critical for the success of PLCs, especially regular and frequent meeting times, collaborative engagement in an ongoing cycle of inquiry, and willingness to drive improvements for students and for whole schools (DuFour & Eaker, 1998; DuFour et al., 2008; Hord et al., 2010; Roy & Hord, 2006).



Works Cited

- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16.
- Anderson, S. G., & Olivier, D. F. (2022). A Quantitative Study of Schools as Learning Organizations: An Examination of Professional Learning Communities, Teacher Self-Efficacy, and Collective Efficacy. *Research Issues in Contemporary Education*, 7(1), 26–51.
- Azeska, A., Starc, J., & Kevereski, L. (2017). Styles of decision making and management and dimensions of personality of school principals. *International Journal of Cognitive Research in Science, Engineering and Education*, 5(2), 47. <https://doi.org/10.5937/IJCRSEE1702047A>
- Baharav, H., & Newman, E. (2019). Contextual research for educational improvement: A collaborative process in Northern California. *Improving Schools*, 22(3), 237–250.
- Bergeron, L. (2020). An investigation into the relationships among middle school teachers' beliefs about collaboration, their perceptions of formative assessment, and selected teacher characteristics. *Current Issues in Education*, 21(3), 1–18.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Elective Teacher Professional Development*. Learning Policy Institute.
- Darrow, A.-A. (2016). The Every Student Succeeds Act (ESSA): What It Means for Students With Disabilities and Music Educators. *General Music Today*, 30(1), 41–44. <https://doi.org/10.1177/1048371316658327>
- Datnow, A., & Hubbard, L. (2015). Teachers' use of assessment data to inform instruction: Lessons from the past and prospects for the future. *Teachers College Record*, 117(4), 1–26. <https://doi.org/10.1177/016146811511700408>
- DeLuca, C., Valiquette, A., Coombs, A., LaPointe-McEwan, D., & Luhanga, U. (2018). Teachers' approaches to classroom assessment: A large-scale survey. *Assessment in Education: Principles, Policy & Practice*, 25(4), 355–375.
- DuFour, R., DuFour, R., Eaker, R., Mattos, M., & Muhammad, A. (2021). *Revisiting professional learning communities at Work®: Proven insights for sustained substantive school improvement*. Solution Tree Press.
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work*. Solution Tree Press.
- DuFour, R., & DuFour, R. (2008). *Revisiting professional learning communities at Work®: New insights for improving schools*. Solution Tree Press.
- Dunn, K. E., Airola, D. T., Lo, W. J., & Garrison, M. (2013). What teachers think about what they can do with data: Development and validation of the data driven decision-making efficacy and anxiety inventory. *Contemporary Educational Psychology*, 38(1), 87–98.
- Eaker, R., & Marzano, R. J. (Eds.). (2020). *Professional Learning Communities at Work® and High-Reliability Schools: Cultures of Continuous Learning (Ensure a viable and guaranteed curriculum)*. Solution Tree Press.
- Ebbeler, J., Poortman, C. L., Schildkamp, K., & Pieters, J. M. (2017). The effects of a data use intervention on educators' satisfaction and data literacy. *Educational Assessment, Evaluation and Accountability*, 29, 83–105. <https://doi.org/10.1007/s11092-016-9251-z>
- Ermeling, B. A. (2010). Tracing the effects of teacher inquiry on classroom practice. *Teaching and Teacher Education*, 26(3), 377–388.
- Espin, C. A., van den Bosch, R. M., van der Liende, M., Rippe, R. C., Beutick, M., Langa, A., & Mol, S. E. (2021). A systematic review of CBM professional development materials: are teachers receiving sufficient instruction in data-based decision-making? *Journal of Learning Disabilities*, 54(4), 256–268.
- Fletcher Jr., E. C., Hernandez-Gantes, V. M., & Smith, C. (2019). This is my neighborhood: An exploration of culturally relevant agency to support high school Latinx students in an urban career academy. *The Qualitative Report*, 24(12), 3,239–3,268.
- Goode, J., Peterson, K., Malyn-Smith, J., & Chapman, G. (2020). Online professional development for high school computer science teachers: Features that support an equity-based professional learning community. *Computing in Science & Engineering*, 22(5), 51–59.
- Hargreaves, A., & O'Connor, M. T. (2018). *Collaborative professionalism: When teaching together means learning for all*. Corwin Press.
- Hoogland, I., Schildkamp, K., Van der Kleij, F., Heitink, M., Kippers, W., Veldkamp, B., & Dijkstra, A. M. (2016). Prerequisites for data-based decision making in the classroom: Research evidence and practical illustrations. *Teaching and teacher education*, 60, 377–386.
- Hord, S., Roussin, L., & Sommers, W. (2010). *Guiding professional learning communities: Inspiration, challenge, surprise, and meaning*. Thousand Oaks, CA: Corwin Press.
- Kippers, W. B., Poortman, C. L., Schildkamp, K., & Visscher, A. J. (2018). Data literacy: What do educators learn and struggle with during a data use intervention?. *Studies in educational evaluation*, 56, 21–31.
- Krasniqi, R. (2020). PRINCIPALS ROLE IN DEVELOPING PROFESSIONAL LEARNING COMMUNITIES. IN *EDUCATION IV*, 87
- Lai, M., Schildkamp, K. (2013). Data-based decision making: An overview. In Schildkamp, K., Lai, M., Earl, L. (Eds.), *Data-based Decision Making in Education*. *Studies in Educational Leadership*, 17. Springer. https://doi.org/10.1007/978-94-007-4816-3_2
- Lasater, K., Albiladi, W. S., Davis, W. S., & Bengtson, E. (2020). The Data Culture Continuum: An Examination of School Data Cultures. *Educational Administration Quarterly*, 56(4), 533–569. <https://doi.org/10.1177/0013161X19873034>
- Lasater, K., Albiladi, W. S., & Bengtson, E. (2021). Developing Positive Data Cultures in High-Stakes Environments: The Role of School Leaders. *Journal of Cases in Educational Leadership*, 24(3), 49–62.
- Leithwood, K. (2021). A review of evidence about equitable school leadership. *Education Sciences*, 11(8), 377.
- Ling, T., & Nasri, N. M. (2019). A systematic review: Issues on equity in education. *Creative Education*, 10(12), 3,163.
- Louis, K. S., & Marks, H. M. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American journal of education*, 106(4), 532–575.
- Lyon, A. R., Corbin, C. M., Brown, E. C., Ehrhart, M. G., Locke, J., Davis, C., Picozzi, E., Aarons, G. A., & Cook, C. R. (2022). Leading the charge in the education sector: development and validation of the school implementation leadership scale (SILS). *Implementation Science*, 17, 48. <https://doi.org/10.1186/s13012-022-01222-7>
- Mandinach, E. B., & Gummer, E. S. (2016). What does it mean for teachers to be data literate: Laying out the skills, knowledge, and dispositions. *Teaching and Teacher Education*, 60, 366–376.
- Mandinach, E. B., & Schildkamp, K. (2021). Misconceptions about data-based decision making in education: An exploration of the literature. *Studies in Educational Evaluation*, 69. <https://doi.org/10.1016/j.stueduc.2020.100842>
- Marcos, T., Wise, D., Loose, W., Belenardo, S., & Padover, W. (2021). How California school principals and teachers engage academic optimism to maximize equity in student learning within low socio-economic status (SES) schools. *Educational Leadership and Administration: Teaching and Program Development*, 33, 1–17.
- Marsh, J. A. (2012). Interventions promoting educators' use of data: Research insights and gaps. *Teachers College Record*, 114(11), 1–48. <https://doi.org/10.1177/016146811211401106>
- Murray, J. (2014). Critical issues facing school leaders concerning data-informed decision-making. *Professional Educator*, 38(1), n1.
- Nadelson, L. S., Miller, R., Hu, H., Bang, N. M., & Walthall, B. (2019). Is equity on their mind? Documenting teachers' education equity mindset. *World Journal of Education*, 9(5), 26–40
- National Equity Project. (n.d.). Educational equity definition. National Equity Project. Retrieved November 30, 2022, from <https://www.nationalequityproject.org/education-equity-definition>
- Ni, L., Bausch, G., & Benjamin, R. (2023). Computer science teacher professional development and professional learning communities: A review of the research literature. *Computer Science Education*, 33(1), 29–60.
- Onyishi, C., & Sefotho, M. M. (2021). Differentiating instruction for learners' mathematics self-efficacy in inclusive classrooms: Can learners with dyscalculia also benefit? *South African Journal of Education*, 41(4), 1–14.
- Oslund, E. L., Elleman, A. M., & Wallace, K. (2021). Factors Related to Data-Based Decision-Making: Examining Experience, Professional Development, and the Mediating Effect of Confidence on Teacher Graph Literacy. *Journal of Learning Disabilities*, 54(4), 243–255. <https://doi.org/10.1177/0022219420972187>
- Parham, A., Adair, A. C., & Reames, E. H. (2020). Data driven decision-making tools for school leaders: Developing tools that enculturate distributive leadership and shared decision-making. *Alabama Journal of Educational Leadership*, 7, 29–41.
- Park, V., & Datnow, A. (2009). Co-constructing distributed leadership: District and school connections in data-driven decision-making. *School leadership and Management*, 29(5), 477–494
- Peterson, S. J., Galvin, B. M., & Lange, D. (2012). CEO servant leadership: Exploring executive characteristics and firm performance. *Personnel Psychology*, 65(3), 565–596.
- Riggins, C., & Knowles, D. (2020). Caught in the trap of PLC Lite: Essential steps needed for implementation of a true professional learning community. *Education*, 141(1), 46–54.
- Roy, P., & Hord, S. M. (2006). It's Everywhere, but What is it? Professional Learning Communities. *Journal of School Leadership*, 16(5), 490–504. <https://doi.org/10.1177/105268460601600503>
- Schildkamp, K. (2019). Data-based decision-making for school improvement: Research insights and gaps. *Educational Research*, 61(3), 257–273.
- Schildkamp, K., Smit, M., & Blossing, U. (2019). Professional development in the use of data: From data to knowledge in data teams. *Scandinavian Journal of Educational Research*, 63(3), 393–411
- Torres, A. C., Bulkley, K., & Kim, T. (2020). Shared leadership for learning in Denver's portfolio management model. *Educational Administration Quarterly*, 56(5), 819–855.
- Verdi, B. (2022). Creating Professional Learning Communities for Music Educators. *Music Educators Journal*, 109(2), 14–21.
- Woodland, R. H. (2016). Evaluating PK–12 professional learning communities: An improvement science perspective. *American Journal of Evaluation*, 37(4), 505–521.

