



DOMAIN	EFFECTIVE PRACTICE	INDICATOR
Instruction	Diagnose and respond to student learning needs	3A.3 Instructional teams use student learning data and instructional strategy (practice) data to design fluid instructional groupings that respond to student need.

Explanation. High-quality Instructional Teams are essential to enhancing teaching and improving student achievement. For instructional teams to improve student learning, they must focus collaboratively on analyzing student learning data to develop appropriate instructional responses and use this data to identify students needing further learning supports or enhancements. School leaders must ensure that appropriate structures and supports are in place to guide each team's work; this may include providing data coaches, and/or other professional development to help teachers effectively analyze data within their teams. Instructional teams must continuously monitor student learning data to evaluate the impact of instructional changes and additional supports or enhancements provided for identified students, and make modifications as necessary.

Questions. How does leadership determine the quality of the collaborative planning that occurs within instructional teams? Do all teams use student learning data to guide their planning? What supports, expertise, and professional development are provided (or needed) to help teachers collaborate together effectively to use student learning data? Do teams use both formal and informal assessment data (e.g., observations of student learning) to make instructional decisions? Do instructional teams clearly identify and support students who are struggling as well as those that need instructional enhancement? Do instructional teams analyze student data within a continuous cycle to determine what is working and what is not?

Instructional teams that consist of groups of teachers organized into grade-levels, grade-level clusters, or subject-areas provide an opportunity for teachers to work collectively to improve instruction and student achievement (Hamilton, et al., 2009). Hattie (2012) suggests that "Within a school, we need to collaborate to build a team working together to solve the dilemmas in learning, to collectively share and critique the nature and quality of evidence that shows our impact on student learning, and to cooperate in planning and critiquing lessons, learning intentions, and success criteria on a regular basis" (p. 172). Research has consistently demonstrated that a collaborative school culture, with educators working together in teams, is linked to stronger instruction and higher student achievement (DuFour, 2011; Goddard, Goddard, & Tschannen-Moran, 2007; Hitt & Tucker, 2016; Ronfeldt, Farmer, McQueen, & Grissom, 2015). Instructional teams often operate as Professional Learning Communities (PLCs) (DuFour, 2011; DuFour & Mattos, 2013), but have also been referred to as professional learning networks and communities of practice (Hirsh, 2018). Collaborative team structures in which teachers analyze student learning data to identify those in need of support or enhancement increase the chances of providing the excellent teaching and learning opportunities for all students that are essential for school improvement (Hirsh, 2018).





How can instructional teams use student learning data to identify students in need of additional instructional supports or enhancements?

Research demonstrates that simply providing time for teachers to meet does not impact student learning, however; teacher collaboration within team meetings must be structured and focused on "the right work" (Saunders, Goldenberg, & Gallimore, 2009; Wei, Darling-Hammond, & Adamson, 2010). In a recent review of the literature, Ronfeldt, et al (2015) concluded that collaboration in which teachers analyze student data and develop instructional responses to address the data is key to promoting gains in student achievement. Teams of teachers must use both formal assessment data and informal observations of student learning to determine students' learning needs and design ways that these needs can be addressed through changes to instructional practice. Effective PLCs are those in which teachers collaborate with a clear and consistent focus on student learning data (Hirsh, 2018; Vescio, Ross, & Adams, 2008).

A review of literature on teachers' use of data concluded that the absence of professional development has hampered many teachers' ability to use the data to make significant changes to their instructional practice (Dat- now & Hubbard, 2015). For significant achievement gains to occur, teachers will likely need training and support in order to engage in frequent and structured collaboration around student data effectively (National Association of Elementary School Principals, n.d.; Saunders, et al., 2009). In response to this need for professional development, investments are being made to support teacher data use through the use of data/instructional coaches, and helping teachers use data effectively within PLCs.

One case study of six low-performing middle schools that supported teacher data use via literacy coaches, data coaches and PLCs, found all of these practices were important contributors to teachers' responses to data (Marsh, Bertrand, & Huguet, 2015). These practices were associated with increases in teachers using data to alter their instructional delivery (as opposed to simply changing topics or materials). The researchers suggest that teacher interactions within PLCs and data coaches facilitate deeper levels of change in teacher pedagogy. Another exploratory case study found that teachers working together in groups were able to more accurately comprehend and interpret student data than teachers working alone, and were more enthusiastic about, and interested in, the process of data analysis (Means, Chen, DeBarger, & Padilla, 2011).

DuFour and Mattos (2013) offer the following suggestions to school leaders seeking to establish high-quality instructional teams/PLCs that are focused in-depth on evaluating evidence of student learning and curriculum/ instruction refinement:

1. Ask teams to create a high-quality, viable curriculum for each unit that specifies the essential learning for all students, agree on pacing guidelines, and develop and administer common aligned formative assessments to monitor each student's learning at the end of each unit. Hirsh (2018) further suggests that PLCs develop pre-assessments to help determine how teachers should spend their time, and allow them to focus on key lessons/strategies and group/regroup students to leverage student and teacher strengths. Some teams will also elect to use daily formative assessments to gauge lesson impact and allow for immediate adjustments (Hirsh, 2018).

- 2. Use the evidence of student learning to identify
 - Students who need additional time and support to become proficient;
 - Students who need enrichment and extension of their learning because they're already highly proficient;
 - Teachers who help students achieve at high levels so team members can examine those teachers' practices, as well as teachers who struggle so that team members can assist the teacher in addressing the issue;

• Skills or concepts that none of the team members were able to help students achieve at the intended level, so the team can expand its learning beyond its members to become more effective in teaching those skills or concepts. The team can seek help from members of other teams in the building with relevant expertise in these areas, specialists from the central office, other teachers of the same content in the district, or networks of teachers throughout the U.S. that they can interact with online.

3. Create a coordinated intervention plan that ensures that all students who struggle receive additional time and support for learning in a way that is timely, directive, diagnostic, precise, and most important, systematic. (p. 38).





Instructional decision-making should be made within "an ongoing cycle of collecting multiple data sources, interpreting data to formulate hypotheses about strategies to raise student achievement and implementing instructional changes to test hypotheses" (National Association of Elementary School Principals, n.d., p. 3). Through the continuous data analysis cycle teachers determine whether instructional changes and intervention/supports being implemented for identified students are working as intended, and then either continue these practices, modify them, or implement different practices.

References

- 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. http://www.tcrecord.org/Content. asp?ContentId=17848
- DuFour, R. (2011). Work together: But only if you want to. *Phi Delta Kappan*, 92(5), 57–61. http://www.allthingsplc.info/ files/uploads/KapanMagazineRickDuFour2011.pdf
- DuFour, R., & Mattos, M. (2013). How do principals really im- prove schools? Educational Leadership, 70(7), 34-40.
- Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teacher College Record*, *109*(4), 877–896.
- Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). Using student achievement data to support instructional decision making (NCEE 2009-4067). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. http://ies.ed.gov/ncee/wwc/publications/practiceguides
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Hirsh, S. (2018, February). Whatever name you give it the PLC plays an important role. *The Learning Professional, 39*(1), 8–9. https://learningforward.org/wp-content/uploads/2018/03/whatever-name-you-give-it-the-PLC-plays-an-import-ant-role.pdf
- Hitt, D. H., & Tucker, P. D. (2016). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research*, *86*(2), 531–569. doi: 10.3102/0034654315614911
- Marsh, J. A., Bertrand, M., & Huguet, A. (2015). *Using data to alter instructional practice: The mediating role of coaches and Professional Learning Communities.* Teachers College Record. https://www.tcrecord.org/Content.asp?ContentID=17849
- Means, B., Chen, E., DeBarger, A., & Padillla, C. (2011). *Teachers' ability to use data to inform instruction: Challenges and supports*. https://www.sri.com/work/publications/teachers-ability-use-data-inform-instruction-challenges-and-supports
- National Association of Secondary School Principals. (2015). *Value-added measures in teacher evaluation*. Board Position Statement, February 18, 2015.
- National Association of Elementary School Principals. (n.d.). Using student achievement data to support instructional decision making. http://www.naesp.org/sites/default/files/Student%20Achievement_blue.pdf
- Ronfeldt, M., Farmer, S., McQueen, K., & Grissom, J. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, *52*(3), 475–514. doi: 10.3102/0002831215585562
- Saunders, W., Goldenberg, C., & Gallimore, R. (2009). Increasing achievement by focusing grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title 1 schools. *American Educational Research Journal*, 46(4), 1006–1033.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80–91.
- Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). *Professional development in the United States: Trends and Challenges*. National Staff Development Council. https://learningforward.org/docs/default-source/pdf/nsdcstudy2010.pdf

