

# Teacher Collaboration and Achievement of Students with LDs: A Review of the Research

[Add to favorites](#)

by *Chris Mattatall & Keith Power*

## Key ideas in this summary:

- Research supports collaboration between general and special education teachers as a means to improve teachers' instructional practice and to improve student outcomes
- School administrative leadership often plays an indirect, but important, role in supporting student achievement by mediating a collaborative school climate.
- Teacher collaboration should not be viewed as a specific strategy or approach to teaching, but should be viewed as a generalized process where teachers regularly meet to share, refine and assess the impacts of the strategies and approaches they are currently using in their classrooms. Collaborative inquiry, therefore, is a method of assessing and refining any and all types of instruction, regardless of whom the instruction is intended for.

## Introduction

For several decades, educational researchers and practitioners have been advocating the use of collaboration as a means of improving teachers' instructional practice and subsequently student outcomes (Goddard et al., 2007; van Garderen et al., 2012). Spurred on by reform efforts that are placing a greater onus on schools to account for student achievement (Bunker, 2008) and the growing number of students with disabilities being served in the general education setting (Winn & Blanton, 2005), **the call for general education teachers to work collaboratively with special education teachers is still growing.**

Hourcade and Bauwens (2002) argue that when teachers collaborate they have an opportunity to **capitalize upon the unique and specialized knowledge and skills of their colleagues**, while Sawyer (2007) maintains that collaboration acts as a **catalyst for instructional creativity and innovation**. In contrast, when teacher collaboration is absent and teachers operate in isolation, school cultures tend to be non-innovative, conservative, and individualistic (Lortie, 1975), whereby little professional growth occurs (Pounder, 1999).

The evidence that collaboration has positive effects on teachers has been well established (for examples see Goddard, et al., 2007; Moolenaar et al., 2012; van Garderen, et al. 2012; Vescio et al., 2008); however, a paucity of data exists to identify the benefits that educator collaboration plays in improving the academic outcomes of students (Bunker, 2008; Vescio, et al., 2008). Thus,

# Essential Characteristics of Teacher Collaboration

In 1992, Friend and Cook broadly defined teacher collaboration as “a style of direct interaction between at least two co-equal parties voluntarily engaging in shared decision making as they work towards a common goal”. Since then, the definition of collaboration has evolved into a **pedagogy where collaborators regularly discuss and reflect on the components of teaching and learning**, including learning activities, lesson plans, assignments, pacing, course design, and assessment, and moreover, utilize data as a means of informing and reconstructing their teaching practices (Earl & Timperley, 2009; Howland & Picciotto, 2003).

However, Hargreaves (2003) notes that collaborative efforts can become a distraction if the collaborators are not focused on student learning and achievement. It is important for education-orientated collaborators to understand that **successful collaboration is grounded in a well-constructed on-going agenda that maintains a clear and persistent focus on data about student learning** (Vescio, et al., 2008; Wimberley, 2012).

## Using Data

While many researchers argue that collaboration should be driven or informed by data (e.g., Little, 2003; Love, 2009; Vescio, et al. 2008), others provides a warning that collaborators need to be careful not to become stapled to spreadsheets that solely focus on tested achievement gains, but instead need to focus their discussions and inquiry on the processes of teaching and learning (Earl & Timperley, 2009; Hargreaves, 2008).

Furthermore, Hargreaves and Shirley (2009) maintain that effective collaborative partnerships and professional learning communities (PLCs) are committed to:

1. Transforming their instruction such that it leads to student achievement;
2. Valuing each other as people in relationships of care, respect, and challenge; and
3. Using quantifiable evidence and shared experience to inquire into teaching and learning issues while making judgments about how they can improve them.

From Hargreaves and Shirley’s perspective, “**data inform but do not drive judgments about practice**” (2009, p. 92). This sentiment is corroborated by Love (2009) who says that using data by itself, even in the context of collaborative inquiry, does not automatically improve teaching and learning. Although varied data must be synthesized, examined, and discussed to serve as a tool for improvement (Bunker, 2008), Love (2009) stipulates that improved teaching comes about when teachers implement sound teaching practices that are grounded in cultural proficiency – an understanding and respect for their students’ cultures – and through an understanding of subject material and how to teach it.



## Six Key Characteristics

Bunker (2008), in her doctoral dissertation, delineates six key characteristics of successful collaboration. These are:

1. A **shared vision** whereby a school's culture is based on mutual support, joint work, and broad agreement of educational values.
2. A focus on clear and common **goals**.
3. **Attention** to results.
4. Structured and on-going **inquiry**.
5. The **deprivatization** of teaching practices.
6. **Time** for reflective dialogue about learning and teaching.

Bunker specifies that all of these characteristics are interrelated and that regardless of the terms used to describe teacher collaboration, these characteristics are essential to collaborative success.

## School Leadership

A final key element of collaborative success is school leadership. Prior research has shown that the average effect size relating leadership to student achievement is 0.25, with **leaders' knowledge of curriculum, instruction, and assessment representing significant predictors for student learning** (Waters, Marzano, & McNulty, 2003). Furthermore, others have noted that

school leadership was second only to teaching when evaluating factors that influence student performance (Leithwood et al., 2004).

Moreover, principals are most effective when they focus their attention on instructional improvement, collaborate with teachers, and encourage teachers to actively work together towards instructional improvement (Supovitz et al., 2010). As discussed below in the results section of this paper, principal **leadership often plays an indirect role in supporting student achievement by mediating a collaborative school climate** (Miller et al., 2010); however, Seashore Louis et al. (2010) emphasize that although it is an indirect effect, it is important.

## Implementation of a Collaborative Framework

Collaborative consultation in educational settings can take many forms, however most models of consultation share commonalities. In this section, these commonalities will be discussed and a brief overview of how schools can adopt a collaborative framework will be addressed. First, issues related to school leadership will be reviewed and then a step-by-step process will be outlined to assist educators in building a more collaborative culture within their schools.

### Role of School Leaders

Principals and school leaders play critical roles in transforming schools from those that rely on traditional isolationist practices to enterprises that utilize collaborative work to enhance student achievement. Evidence suggests that **not only do teachers need to work together around instruction and student learning, but that administrators also need to be a part of the process** (Hallinger, 2003; Seashore Louis, et al. 2010).

First and foremost, school leaders need to provide instructional leadership, which includes providing constructive feedback to improve teaching or implementing a school-wide system that provides such support (Miller, et al. 2010; Seashore Louis, et al., 2010). Principals can also facilitate a collaborative culture by **promoting shared leadership** within their schools, whereby teachers are afforded the opportunity to exert influence on and participate in school-related decisions. Shared leadership helps to establish shared goals and a collective responsibility among school personnel for student learning, one of the foundational tenants of successful collaborative inquiry.

Furthermore, good school leaders tend to work towards developing organizational trust. Principals' respect and personal regard for teachers, competence in one's core responsibilities, and personal integrity have all been shown to support relational trust within schools (Bryk & Schneider, 2002). Finally, principals and school administrators need to provide teachers with the organizational structures and time that is necessary to engage in collaborative inquiry. This should include **regularly scheduled meeting times that are embedded within the school day** (Nelson, et al., 2010; Wimberley, 2012).

## Stages of Collaborative Inquiry

As educators set out to engage in collaborative inquiry it is important that the structure and format for the consultation be appropriate for the purpose (Reinhiller, 1999). With the understanding that a collaborative group consists of a team of professionals that are operating as equals to support each other and coordinate their efforts to achieve mutually agreed upon outcomes (Ludlow, 2011), collaborators need to start by asking themselves, “**What is the purpose of this consultation and what are our expectations?**”

Based on the above question and understanding collaborators can implement the following steps:

1. Analyze and specifically define what is the **issue(s) of concern**.
2. **Identify reasons for the issue** while paying attention to classroom demands and student strengths, weaknesses, and needs. Data examined must be rich enough to provide teachers with a basis for considering alternative approaches (Cochran-Smith & Lytle, 1999).
3. Use the information gathered to **brainstorm instructional or environmental adaptations** that may solve the issue. Consideration should be given to strategies that have theoretical and empirical support. This step is essential to success as Supovitz and Christman (2003) and Supovitz (2002) found that measurable improvements in student achievement only occurred when collaborators focused on altering their instructional practices.
4. Collectively choose and implement an **intervention strategy**.
5. **Collect and analyze data** (student work samples, assessments, classroom observations, teacher’s reflective notes, etc.) during the intervention and as a group evaluate if the strategy is meeting the needs of the target student(s) and your team’s expectations. It is imperative that varied data be collected, synthesized, examined, and discussed to serve as tools for improvement.
6. **Make a decision** to maintain the intervention if it is working successfully or brainstorm, implement, and evaluate new ideas and strategies if required.

These steps simply provide a sequencing of events to help support educators as they establish a collaborative inquiry group. For more detailed information on what is required of collaborators during each step of the cycle one can refer to the work of Friend and Cook (1992), Kowalski and Lasley (2010), Lassonde and Israel (2010), Love (2009), Mandinach and Honey (2008), Nelson, et al. (2010), and Reinhiller (1999).

## Parameters for the Review of the Literature

Memorial University’s Summons system and Google Scholar were searched for published reports from 2000 to 2014. This search, although not exhaustive, yielded a large number of studies (over 1000). After an initial review of the extensive list, further parameters were placed on the search. Only studies that concentrated on collaborative work that took place away from the classroom were included. For this reason, studies that explicitly examined co-teaching and

peer-coaching were not included in this review. Using these parameters our search yielded only ten empirical studies that evaluated the relationship between teacher collaboration and student achievement, which serve as the basis of this review.

## Results

Although this review article is intended to identify evidence that supports teacher collaboration as an effective strategy for improving the outcomes of students with LDs, several studies that evaluated the effects of collaboration on general education student outcomes have also been included in this review. The logic for this decision rests in the notion that all students, regardless of who they are, need high quality instruction (Bickel & Bickel, 1986; Englert et al., 1992). In other words, students with disabilities require the same high quality instructional practices as their general education schoolmates.

Furthermore, **teacher collaboration cannot be viewed as a specific strategy or approach to teaching, but should be viewed as a generalized process where teachers regularly meet to share, refine and assess the impacts of the strategies and approaches they are currently using in their classrooms** (Schomoker, 2007). Thus, collaborative inquiry is a method of assessing and refining any and all types of instruction, regardless of whom the instruction is intended for.

In general, despite a paucity of published work that has evaluated the effects of teacher collaboration on student outcomes (Bunker, 2008; van Garderen, et al. 2012), evidence indicates there is a positive association between the two variables. A summary of the evidence reviewed for this paper is presented in Table 1.

Table 1. *Summary of Articles and Their Study Findings related to Student Outcomes*

| Study                 | Research Design | Variables Measured                | Main Findings   |
|-----------------------|-----------------|-----------------------------------|---|
| Vescio, et al. (2007) | Review of PLCs  | Various student academic outcomes | Eight out of eight studies measuring student outcomes reported a positive association between PLCs and student achievement. Collective results unequivocally supported the notion that student learning |

|                          |  |                                    |   |
|--------------------------|--|------------------------------------|---|
|                          |  |                                    | increases when teachers participate in PLCs.  |
| Goddard, et al. (2007)   | Naturalistic Quantitative Methods (Hierarchical linear modeling) | Mathematics and Reading            | Positive small to moderate effects on both mathematics and reading achievement.   |
| Moolenaar, et al. (2012) | Quantitative Survey Methods                                      | Language and Mathematics           | Positive effects found for language development, but not for mathematics development.   |
| Miller, et al. (2010)    | Randomized Control Trial   | Mathematics and Reading            | Small effects sizes were reported for both mathematics and reading achievement.   |
| Wimberley (2011)         | Quantitative Survey Methods (between-group comparison)           | Communication Arts and Mathematics | Large positive effects were found for both communication arts and mathematics.  |
| Love (2009)              | Three Case Studies (descriptive statistics)                      | Overall proficiency                | Proficiency increased for all student groups across various grades and locations. Effects were shown to be highly beneficial for students |

|                       |             |   |  |
|-----------------------|-------------|---|--|
|                       |             |   | with learning disabilities.  |
| Hunt et al. (2003)    | Qualitative | Academic and Social Participation                 | Students became more engaged and demonstrated higher levels of assertiveness, self-pride, motivation, persistence, and productivity.   |
| Butler, et al. (2004) | Qualitative | Reflective learning (self-regulation development) | Students became more active and engaged in reflecting on their learning. They also became more confident, independent, and self-aware. |

## Discussion

The purpose of this review was to examine the empirical evidence related to the association between teacher collaboration and student achievement for students with LDs. Given the paucity of studies that explicitly examined this relationship we also considered studies that examined the outcomes for general education students as well. This rationale is supported by the notion that **all students require effective instruction and because collaboration is a process for enhancing all types of instruction for all categories of students.**

Overall, ten studies were identified for inclusion in this review with all ten providing evidence to support the relationship between collaborative efforts and enhanced student achievement. Effect sizes, when reported, ranged from small to large (ES = 0.07 to 1.32). Moreover, the ten studies included in this review were conducted in a variety of geographical locations with diverse groups of learners and utilized an assortment of research methodologies, including qualitative, quantitative, and mixed methods, to establish their findings. These parameters offer support for the generalization of findings that teacher collaboration is positively supportive of student achievement.

**We conclude that the growing evidence base clearly demonstrates that when teachers participate in a collaborative process that allows them to engage in joint-inquiry and**

capitalize upon the unique knowledge and skills of their colleagues that they can expect to experience meaningful shifts in their practice with their students becoming the beneficiaries.

## Related Resources on the LD@school Website

[Click here to access the video \*Using Collaborative Teacher Inquiry to Support Students with LDs in Math.\*](#)

[Click here to access the article \*Collaboration between teachers in secondary schools.\*](#)

[Click here to access the answer to the question \*What should I do to ensure a successful meeting with parents of my students with LDs?.\*](#)

[Click here to access the article \*Effective Parent-Teacher Partnerships: Considerations for Educators.\*](#)

[Click here to access the article \*Introduction to Transition Planning for Students with LDs.\*](#)

## References

Bickel, W.W., & Bickel, D.D. (1986). Effective school, classrooms, and instruction: Implications for special education. *Exceptional Children*, 52, 489-500.

Bryk, A.S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.

Bunker, V. J. (2008). *Professional learning communities, teacher collaboration, and student achievement in an era of standards based reform*. Ann Arbor, MI: ProQuest.

Butler, D. L., Lauscher, H. N., Jarvis-Selinger, S., & Beckingham, B. (2004). Collaboration and self-regulation in teachers' professional development. *Teaching and Teacher Education*, 20(5), 435-455. Retrieved from <http://dx.doi.org/10.1016/j.tate.2004.04.003>

Cochran-Smith, M., & Lytle, S.S. (1999). Relationship of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24(1), 249-301. Retrieved from <http://www.jstor.org/stable/1167272>

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Earl, L. M., & Timperley, H. (2009). Understanding how evidence and learning conversations work. In L.M. Earl & H. Timperley (Eds.), *Professional learning conversations: Challenges in using evidence for improvement* (pp. 1-12). Netherlands: Springer.

Englert, C. S., Tarrant, K. L., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. *Teacher Education and Special Education, 15*(2), 62-86. doi:10.1177/088840649201500203

Friend, M, & Cook, L. (1992). *Interactions: Collaboration skills for school professionals*. White Plains, NY: Longman.

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. *Teachers College Record, 109*(4), 877-896.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 329-351.

Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Teachers College Press.

Hargreaves, A. (2008). Leading professional learning communities: Moral choices amid murky realities. In A.M Blankstein, P.D. Houston, R. W., & R.W. Cole (Eds.), *Sustaining professional learning communities*, 175-197. Thousand Oaks, CA: Corwin Press.

Hargreaves, A., & Shirley, D. (2009). *The fourth way*. Thousands Oakes, CA: Corwin Press.

Hourcade, J., & Bauwens, J. (2002). *Cooperative teaching: Rebuilding and sharing the schoolhouse*. Austin, TX: Pro-Ed.

Howland, J., & Picciotto, H. (2003). Professional development from the inside: Teacher collaboration in the independent secondary school.

Hunt, P., Soto, G., Maier, J., & Doering, K. (2003). Collaborative teaming to support students at risk and students with severe disabilities in general education classrooms. *Exceptional children, 69*(3), 315-332. Retrieved from <http://www.casenex.com/casenex/cecReadings/collaborativeTeaming.pdf>

Kowalski, T., & Lasley, T. J. (2010). *Handbook of data-based decision making in education*. Routledge.

Lassonde, C. A., & Israel, S. E. (2010). *Teacher collaboration for professional learning: Facilitating study, research, and inquiry communities*. San Francisco: John Wiley & Sons.

- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. New York: Wallace Foundation.
- Little, J. W. (2003). Inside teacher community: Representations of classroom practice. *Teacher College Record*, 105(6), 192.
- Lortie, D.C. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- Love, N. (2009). Building a high-performing data culture. In N. Love (Ed.), *Using data to improve learning for all: A collaborative inquiry approach*. Thousand Oaks, CA: Corwin Press.
- Mandinach, E. B., & Honey, M. (2008). *Data-Driven School Improvement: Linking Data and Learning*. New York, NY: Teachers College Press.
- Miller, R. J., Goddard, Y. L., Goddard, R., Larsen, R., & Jacob, R. (2010, October). *Instructional Leadership: A pathway to teacher collaboration and student achievement*. Paper presented at the University Council for Educational Administration Convention, New Orleans, LA.
- Moolenaar, N. M., Slegers, P. J., & Daly, A. J. (2012). Teaming up: Linking collaboration networks, collective efficacy, and student achievement. *Teaching and Teacher Education*, 28(2), 251-262. doi:10.1016/j.tate.2011.10.001
- Nelson, T.H., LeBard, L., & Waters, C. (2010). How to create a professional learning community. *Science and Children*, 76(2), 36-40
- Pounder, D. G. (1999). Teacher teams: Exploring job characteristics and work-related outcomes of work group enhancement. *Educational Administration Quarterly*, 35(3), 317-348. doi:10.1177/0013161X99353002
- Sawyer, K. (2007). *Group genius: The creative power of collaboration*. New York: Basic Books.
- Schmoker, M. (2007). A chance for change: Key levers for improving teaching and learning. *American School Board Journal*, 194(4), 45-46.
- Seashore Louis, K., Dretzke, B., & Wahlstrom, K. (2010). How does leadership affect student achievement? Results from a national US survey. *School effectiveness and school improvement*, 21(3), 315-336. doi:10.1080/09243453.2010.486586
- Supovitz, J. (2002). Developing communities of instructional practice. *The Teachers College Record*, 104(8), 1591-1626.
- Supovitz, J. A., & Christman, J. B. (2003). Developing communities of instructional practice: Lessons for Cincinnati and Philadelphia. *CPRE Policy Briefs* pp. 1-9. Pennsylvania: University of Pennsylvania.

Supovitz, J., Sirinides, P., & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly*, 46(1), 31-56. doi:10.1177/1094670509353043

van Garderen, D., Stormont, M., & Goel, N. (2012). Collaboration between general and special educators and student outcomes: A need for more research. *Psychology in the Schools*, 49(5), 483-497. doi:10.1002/pits.21610

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. doi:10.1016/j.tate.2007.01.004

Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-Continent Research for Education and Learning.

Wimberley, C. E. (2012). *Teacher collaboration and student achievement* (Doctoral dissertation). Lindenwood University, Saint Charles, Missouri.

Winn, J., & Blanton, L. (2005). The call for collaboration in teacher education. *Focus on Exceptional Children*, 38(2), 1-10.

---

*Dr. Mattatall is an assistant professor of special education in the Faculty of Education at Memorial University of Newfoundland. His research interests include peer-mediated learning approaches to address reading and mathematics disabilities in primary and elementary school children, as well as the effects of data-informed collaboration to help educators meet the needs of all students within schools.*

*Mr. Power is a doctoral student in the Faculty of Education at Memorial University of Newfoundland. His research interests include childhood development, teacher education and development, and comprehensive school health.*

By [LDAOeng](#) | May 13th, 2014 | Categories: [Educator Supports](#) | Tags: [Article](#), [Evidence-Informed](#) | [0 Comments](#)

-

[Leave A Comment](#)

You must be [logged in](#) to post a comment.

[Sidebar Anchor](#)

REQUEST A RESOURCE

Let us know what you would like to see or know more about on the LD@school website!

[Request A Resource](#)

## SUBMIT A RESOURCE

Do you have a resource you think others could benefit from? Share it with us!

[Submit A Resource](#)

### Contact Us

365 Evans Avenue, Suite 202

Toronto, ON M8Z 1K2

416 929 4311

[info@ldatschool.ca](mailto:info@ldatschool.ca)