



Bibliometric Analysis on The Outcomes of Teacher Leadership for Schools' Sustainable Improvement

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Abstract: Teacher leadership is a special role and responsibility carried out by teachers so that they effectively provide services to student learning and collaborate in quality improvement towards continuous improvement of existing systems in schools. Currently, there have been many studies related to teacher leadership and of course with various research plans in the future. The purpose of this study is to find out how the outcomes of teacher leadership in sustainable school improvement by conducting an articles review supported by bibliometric analysis consisting of 78 published articles in the last decade years, from 2013 to 2023 sourced from various trusted database publishers such as Google Scholar, Science Direct, Springer, Emerald, Eric, and Proquest. The results show that the outcomes of the implementation of teacher leadership are student learning with the existence of effective learning practices by teachers in and out of the classroom supported by the existence of a supportive professional learning community and/or organizational learning environment in schools which ultimately has implications for instructional practice.

Keywords: SLR; Teacher Leadership; Teacher Leadership Outcomes; Schools' Sustainable Improvement

Introduction

Previous research has shown that teacher leadership in schools plays an important role in the effectiveness and sustainable improvement of schools. Therefore the school system must pay attention to teachers to achieve high performance through leadership roles that can make them impact both students and fellow colleagues (Curtis, 2013). There has been a lot of literature that examines the concept of teacher leadership and its processes (Harris, 2002; Harris & Jones, 2019; York-Barr & Duke, 2004). Basically, teacher leadership refers to teacher behavior in carrying out several aspects of leadership such as making instructional or learning decisions, helping novice teachers, leading school activities, and collaborating with the community (Sharar & Nawab, 2020) so that the concept of teacher leadership is theoretically part of distributive leadership (Harris, 2005). In line with Curtis (2013) statement that teacher leadership can be defined as the specific roles and responsibilities carried out by teachers to be effective in providing services to student learning, and collaborating in quality improvement towards improving existing systems in schools.

The involvement of teachers in leadership activities has a profound effect on their perspective on how decisions are made in schools (Elfers & Plecki, 2016). Teacher leadership can be characterized by the character of adhering to a work ethic, work in a



team, have a spirit of leadership and influence, openness, have a positive influence, dare to take risks and have the ability in learning (teaching related skill) (Jackson et al., 2010). Other characteristics of teacher leadership, namely the existence of personal and professional development in knowledge, skills, and dispositions, as well as confidence in the ability as agents of change in influencing the school environment in a positive direction (Lowery-Moore et al., 2016). Based on existing concepts and empirical research, it can be stated that the role of teacher leadership is essential towards sustainable school improvement, seeing the impact that can be produced, as in several studies which suggest that teacher leadership has an impact on student learning in the classroom (Fairman & Mackenzie, 2015; Nguyen et al., 2020; Ningsih & Wijayanti, 2019; Valdez et al., 2015; Wilson, 2016) with an effective process of learning practices by teachers in the classroom (Coggins & McGovern, 2014; Elfers & Plecki, 2016; Lai & Cheung, 2015; Xie & Shen, 2013). In this context the implementation of learning effectiveness can be achieved if the teacher in his duties is followed by a supportive school environment (Lowery-Moore et al., 2016; Pang & Miao, 2017; Schott et al., 2020), a professional learning community (Curtis, 2013; Ding & Thien, 2022; Sales et al., 2017; Sebastian et al., 2016) and the existence of an organizational learning culture in schools (Cherkowski, 2018; Printy & Liu, 2021; Wiczorek & Lear, 2018). In addition, it is also supported by increased teacher job satisfaction due to increased teacher confidence in carrying out their duties (Meredith et al., 2022; Sun & Xia, 2018). However, on the other hand, what is problematic is that it is not easy to implement teacher leadership in schools effectively and make changes because there are still the status quo which is still attached to some teachers (Curtis, 2013).

Therefore it is important to carry out research on an ongoing basis regarding the implications and impacts that can be generated by the implementation of effective teacher leadership in schools on the continuous improvement of school quality as well. There are many previous studies that have examined the impact of teacher leadership with various research methods used within ten years starting from 2013-2023 which can be described as follows.

Figure 1 shows an increase in publications related to the impact or implications of teacher leadership from year to year including a drastic increase in 2022. However, the limitations of this study are using empirical research and literature reviews, therefore in this study, to complement and prove the validity of the research that has been done, a systematic approach to literature review is needed using the help of bibliometric analysis in knowing the implications or impacts of the teacher's leadership process on sustainable school improvement.

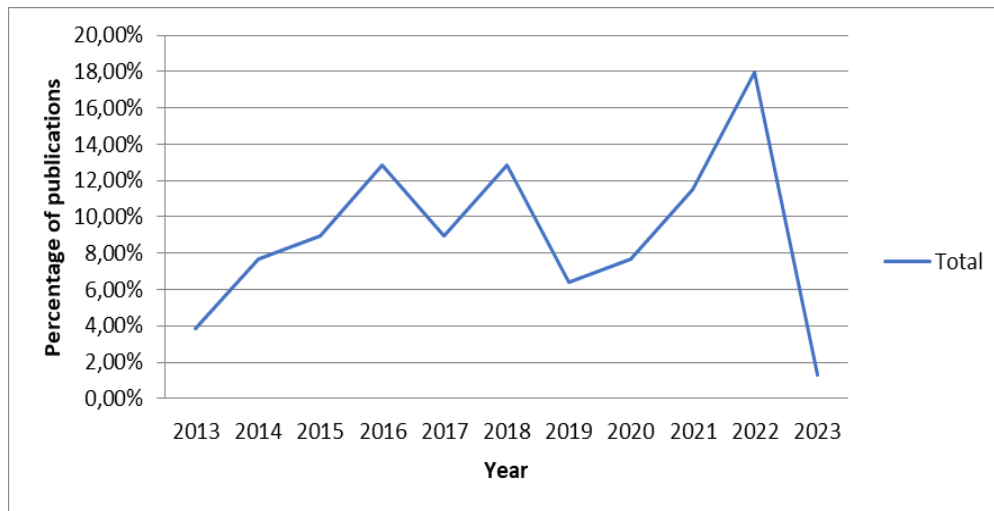


Figure 1. Publications on the outcomes of teacher leadership over years (2013-2023)

Systematic literature review (SLR) is an effective and reliable tool that can be used in summarizing the results of research that has been done to find a research gap (Linde & Willich, 2003). A systematic review of the literature in a particular scientific field is important in identifying research questions, as well as for justifying future research in that field (Torres-Carrion et al., 2018). This study focuses on methodologies, approaches, keywords, and previous research related to the impact or implications of teacher leadership for sustainable school improvement. Thus, through this research, approaches, gaps, and future research directions can be identified. Next, it can be explained more fully in section 2, namely the methodology which describes the data collection strategy and criteria for inclusion and exclusion in the research data that has been found. Part 3 is the presentation of the results and interpretation of the research results and continued in part 4 research questions after certain reviews and experiments have been carried out and finally describes the results and makes conclusions in section 6.

Method

As explained above, Systematic Literature Review (SLR) is essentially focused on the publication of research that has been done previously related to the impact and implications of teacher leadership. The main objective of this research study consists of several steps, namely: (1) Conducting an easy screening and selecting research related to teacher leadership from several different databases; (2) Identify the year of publication, publisher, country, most citations, and relevant topics that discuss the impact of implementing teacher leadership; (3) Identifying the methods used and the reasons; and (4) Identify research gaps related to teacher leadership. With reference to the procedures, principles, and evaluation of the Systematic Literature Review (SLR)

based on the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) reporting guidelines which consist of several steps carried out starting from the background of research studies, screening strategies, data collection, finding research question, and conducting assessment criteria in selecting relevant research studies and data analysis.

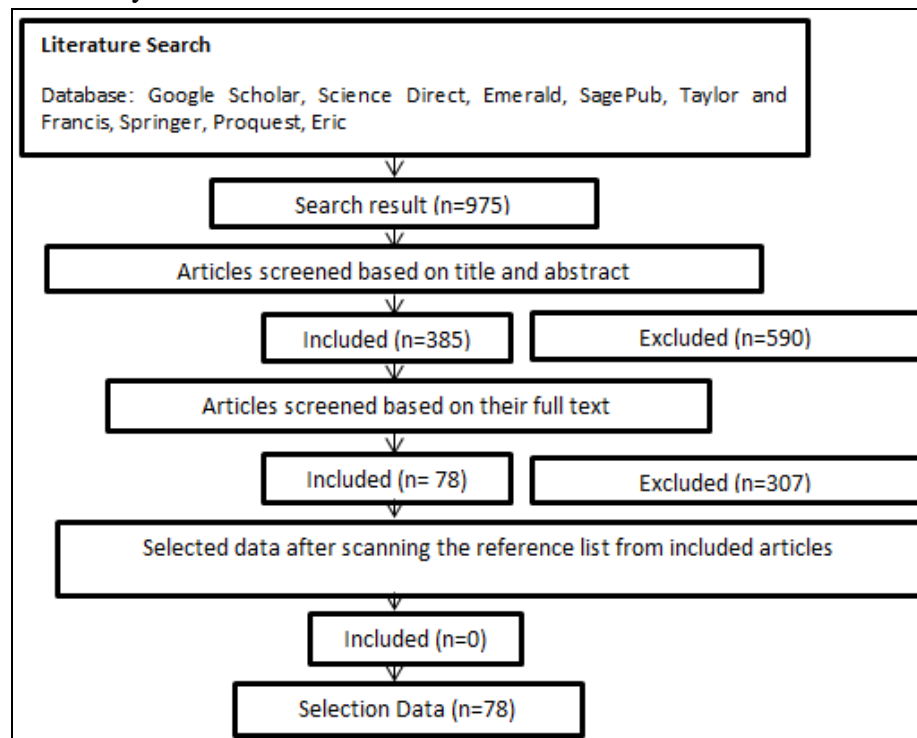


Figure 2. Overview of paper selection on SLR procedures

Each of the steps and processes above is carried out to ensure that there are no irrelevant papers in the data list and only include paper publications that are appropriate to the topic. Paper data obtained from various sources of existing data base journals. In this SLR research, the publication of data papers is limited within the last ten years, namely from 2013 to 2023. The process of Systematic Literature Review (SLR) uses the help of Publish or Perish, Mendeley, Vosviewer, Ms Excel to perform data networking, find duplicate data, and provide several types of diagrams. Based on the results of the search and screening, a total of 975 papers from various types of publications were found, then excluding papers from the list based on citation scores, types of publications and topics that match the research questions that discuss the impact and implications of teacher leadership through benchmarking priority on this list.

The next stage after selecting papers based on the research topic is reading the title and abstract. The first thing to do is to read the title of the paper that is not in accordance with the research topic regarding the impact and implications of teacher leadership to be excluded from the data list and then proceed with reading the abstract to find out the main purpose of the research paper if the title does not provide the

required information. After exclusion based on the titles and abstracts of a total of 590 papers, then a manual search was carried out on Google Scholar to find the full text of the selected papers and found 307 papers that could not be accessed in full so that further exclusion was carried out from the data list.

The last step that was done was to manually find 78 research papers that met the criteria for bibliometric analysis related to the impact or implications of teacher leadership on sustainable school improvement and then presented and discussed in the next section. Finally, Research question (RQ) is the most important part of this research process which forms the basis of each step and stage carried out as well as research objectives. This section will also affect the selection of keywords and criteria used in the SLR method to screen paper publications. The RQ of this research is how the outcomes of teacher leadership impact on sustainable school improvement.

Results and Discussion

Results

This section will present the results of a bibliometric analysis of the impact or implications of teacher leadership on sustainable school improvement. Based on the data that has been obtained, a descriptive analysis can be presented in terms of publication type, distribution of publishers, findings benchmark papers that have been referenced more than 100 times, research collaborations between various countries, author's keyword analysis, predictions outcomes from teacher leadership, as well as describing the top 10 journals in the world.

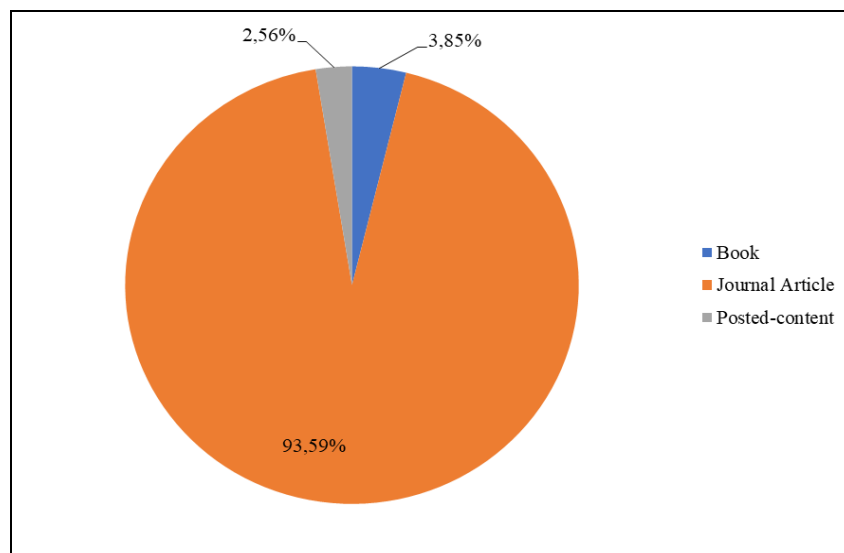


Figure 3. Publication type pie chart

Figure 3 shows publication type statistics. From this, it can be interpreted that almost all types of publications taken were published in the form of journal articles out

of the total types of publications about teacher leadership which shows that publications about the impact or implications of teacher leadership have increased from year to year and at the same time the publication rating in journal publications is also experienced a rapid increase.

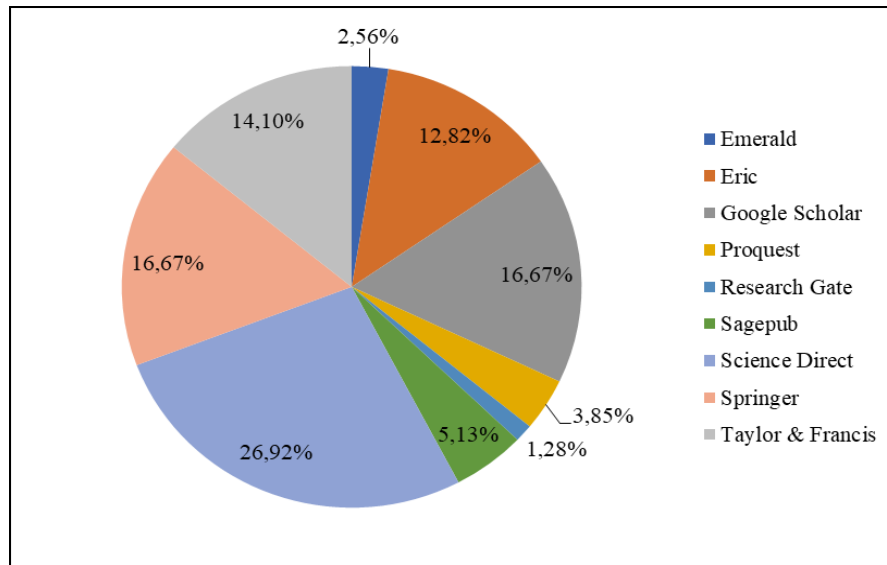


Figure 4. Distribution of databases pie chart

In Figure 4, it is presented regarding the distribution of databases on the impact of teacher leadership on sustainable school improvement. Number of publications in the database of Science Direct is the highest among other databases. Then followed by Springer and Google Scholar which also experienced a related high growth.

Table 1. Top 10 journals in Teacher Leadership Impacts Last Decade (2013-2023)

No.	Sources	Citation
1	International Journal of Leadership in Education	454
2	Teaching and Teacher Education	406
3	Journal of Educational Change	347
4	International Journal of Teacher Leadership	229
5	American Journal of Education	228
6	Educational Management Administration & Leadership	211
7	School Effectiveness and School Improvement	179
8	Educational Research Review	155
9	Aspen Institute	138
10	International Journal of Educational Research	110

Table 1 shows the top 10 journals that publish teacher leadership and its impact based on the highest number of references or citations. The journal with the most references is a well-known source in the field of education management, especially in



the sub-sector of educational leadership which plays an important role in developing the trend of further research studies in the outcomes of teacher leadership.

Table 2. Publication of papers with more than 100 citations

No.	Title	Citation
1	How teacher leaders influence others and understand their leadership	332
2	The role of teacher leadership in how principals influence classroom instruction and student learning	228
3	Enacting teacher leadership: The role of teachers in bringing about change	211
4	Examining integrated leadership systems in high schools: connecting principal and teacher leadership to organizational processes and student outcomes	179
5	The teacher leadership process: Attempting change within embedded systems	173
6	Finding a New Way: Leveraging Teacher Leadership to Meet Unprecedented Demands	138
7	Teachers' perceived professional space and their agency	130
8	Who am I and where do I belong? The perception and evaluation of teacher leaders concerning teacher leadership practices and micro politics in schools	120
9	Teacher-perceived distributed leadership, teacher self-efficacy and job satisfaction: A multilevel SEM approach using the 2013 TALIS data	110

Table 2 shows the benchmark paper for the impact of teacher leadership. The paper was referenced more than 100 times. There is one paper that has been referenced more than 300 times among other papers entitled "How teacher leaders influence others and understand their leadership". This shows that this list paper will help researchers to find new ideas and knowledge in the development of research topics on teacher leadership impacts.

In the figure 5 below presents statistics on the number of citations regarding the impact of teacher leadership over a period of 10 years, from 2013 to 2023. From the visualization diagram above, it can be seen that the most citations occurred in 2016 with 785 citations. In the previous year it can be seen that the trend has increased from year to year and the trend has decreased thereafter. However, predictions may be that there will be another increase in 2023 and the following years.

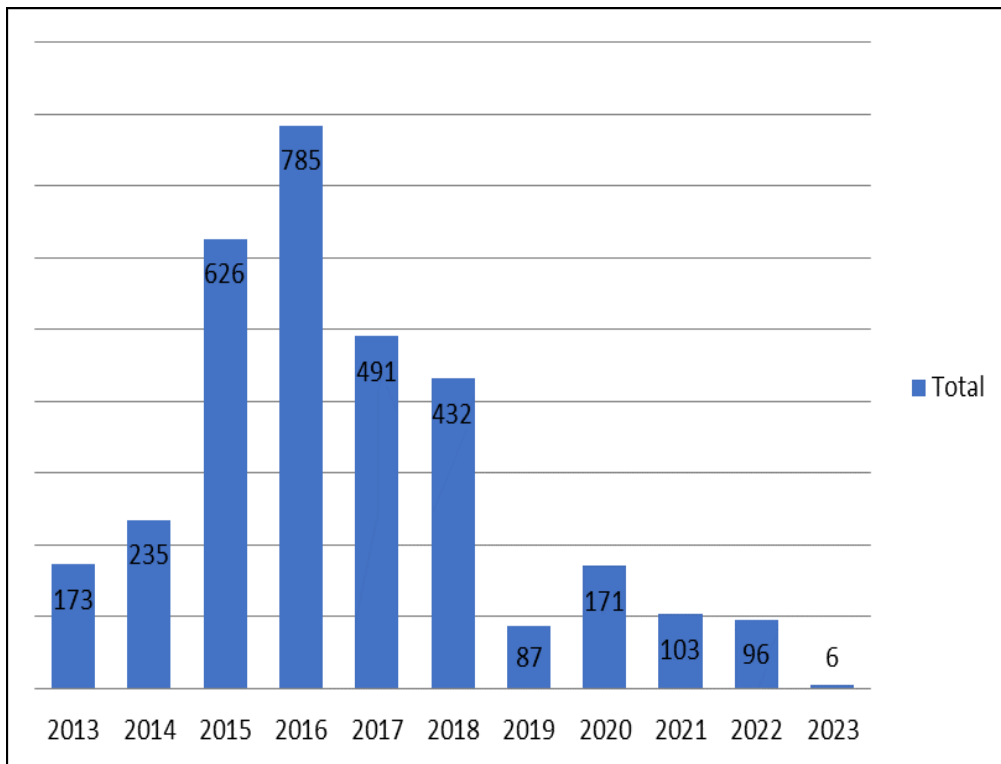


Figure 5. Citation from year to year (2013-2023)

According to the trend of citation year to year shows the importance of further research studies on teacher leadership in order to find out the implications and development of increased teacher leadership competencies.

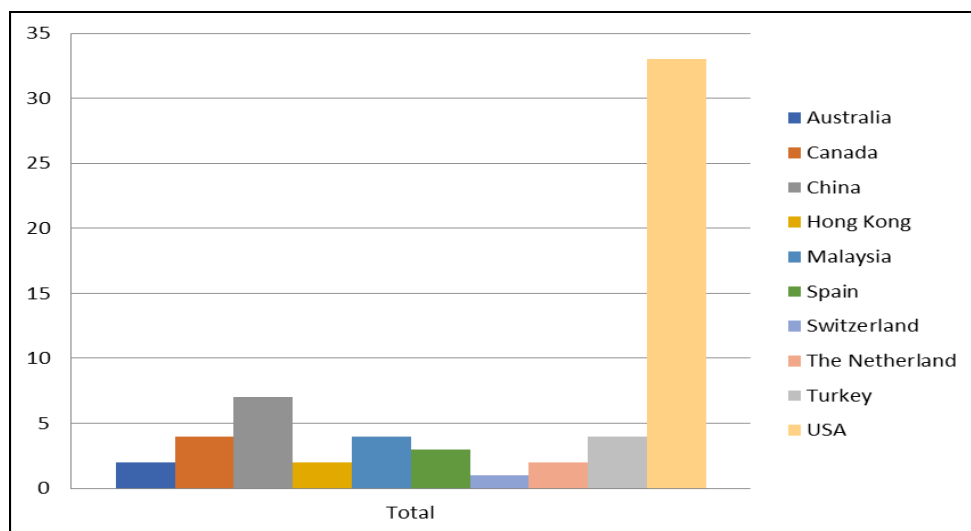


Figure 6. Top 10 countries researched on teacher leadership (2013-2023)

Figure 6 shows the top 10 countries that publish on the impact of teacher leadership obtained through a search of the selected paper database. From the

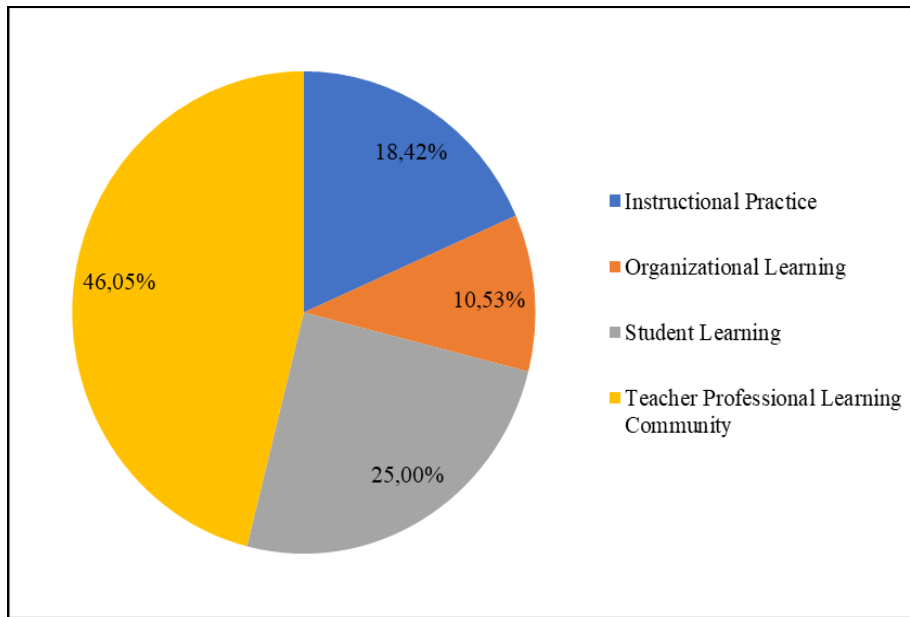


Figure 8. Outcomes area of teacher leadership

Figure 8 shows the outcome areas of teacher leadership. The above shows that there are five areas in general that are produced when teacher leadership is implemented which ultimately has an impact on sustainable school improvement. The teacher professional learning community which is part of teacher professional development is the area with the highest outcomes of 46.5% of other areas through the implementation of teacher leadership, then followed by the impact on student learning areas and the practice of the learning process by teachers in the classroom.

Discussion

The Process of Teacher Leadership and its' Impact

Teacher leadership is now considered a catalyst for educational reform. Many education systems have recognized the main contribution of teacher leaders and their positive influence on school progress (Pang & Miao, 2017). It was argued that every teacher can lead and act strategically as a leader and become an agent of change in sustainable school improvement even more broadly in educational change for the better (Ankrum, 2016; Garcia Carrion & García-Carrión, 2015). York-Barr and Duke (2004) articulate that teacher leadership is a concept in which there is a process by which teachers both individually and collectively influence colleagues, principals and the school community in improving student learning practices which ultimately have an impact on sustainable school improvement. In this discussion section, several points will be discussed which represent the impact of teacher leadership in sustainable school improvement through the following figure.

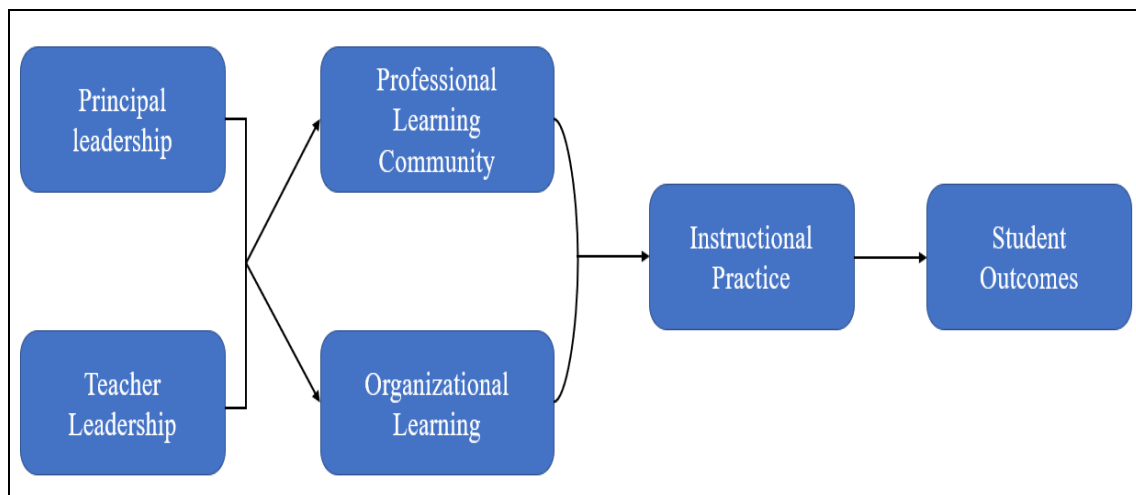


Figure 8. Process outcomes area of teacher leadership

Based on the literature review procedures carried out, it was found that teacher leadership is implemented well if the principal's leadership is also effective so that in the end it will have an impact on student learning outcomes mediated by teacher professional learning community (PLC) and organizational learning which of course in this section has an impact on the area of instructional practice for school sustainable improvement.

Professional Learning Community and Student Outcomes through Teacher Leadership

The research results of Ding & Thien (2022) show that the implementation of teacher leadership influences the professional learning community of teachers in schools/professional learning community (PLC) mediated by learning-centered leadership by the principal. This is the same as research from Ankrum (2016) which



states that a school leader plays an important role in exploring and utilizing the potential of teacher leadership to make changes in schools by instilling together leadership in the school community, responsibility and accountability which become shared beliefs, which in turn can be used as a catalyst for change in the school community. Related to the professional learning community, it was argued that the professional learning community (PLC) refers to the critical attitude of teachers in interrogating their learning practices in a sustainable, reflective and collaborative manner in order to promote and enhance student learning (Stoll & Louis, 2008).

Other research findings indicate that the existence of PLC plays an important role in change in the context of developing a coherent structure, collaborative culture, and effective learning activities, which in turn will also help new teachers to overcome difficulties at the start of work and encourage their motivation to transform (Tam, 2015). In line with Dufour's statement (2006) which stated that in order to create a professional learning community, it is important to focus on three important things, namely prioritizing learning rather than teaching, working collaboratively, and being responsible for achieving good learning outcomes. He further stated that this PLC is described by referring to the combination of each individual who is responsible and has an interest in improving the quality of education carried out by individuals at the lower level to the upper level, for example class-level teaching teams, school committees, school departments, entire school districts, national education departments, national professional organizations, and so on (Dufour, 2006). Regarding the success of PLC, Katz, Earl, & Ben Jaafar (2009) put forward four key characteristics of the success of professional learning communities, namely: (1) teachers have a challenging focus; (2) teachers are able to create productive relationships through self-confidence and colleagues; (3) teachers collaborate for mutual benefit; and (4) teachers engage in rigorous investigation (Katz et al., 2009).

Langdon Warren (2021) in his research discusses the importance of teacher leadership to improve student learning where specifically it is said that the teacher as a leader, both outside and inside the classroom, is driven by a desire to improve student learning which will ultimately have an impact on student success academically. In line with several studies suggesting that teacher leadership has an impact on student learning in the classroom (Fairman & Mackenzie, 2015; Nguyen et al., 2020; Ningsih & Wijayanti, 2019; Valdez et al., 2015; Wilson, 2016) by implementing learning practices effectively (Coggins & McGovern, 2014; Elfers & Plecki, 2016; Lai & Cheung, 2015; Xie & Shen, 2013) through the support of a supportive school environment (Lowery-Moore et al., 2016; Pang & Miao, 2017; Schott et al., 2020) and an effective professional learning community (Curtis, 2013; Ding & Thien, 2022; Sales et al., 2017; Sebastian et al., 2016).



Organizational Learning and Student Outcomes through Teacher Leadership

Teacher leadership is a means to build organizational learning and capacity to improve teaching (Wieczorek & Lear, 2018). As further stated by Wieczorek & Lear (2018) that through leadership, teachers can improve quality learning practices in schools. In addition, Kiliņ's research (2014) which examined the direct and indirect effects of teacher leadership on learning practices mediated by teacher self-efficacy, found that the level of teacher efficacy had a direct impact on teacher leadership, and teacher leadership did not have a direct effect on learning practices, but when mediated by self-efficacy teachers and a supportive organizational environment. In this context, Sokol, Gozdek, & Figurska (2015) stated that the importance of school principal leadership to improve teacher leadership abilities has an impact on the school's learning culture as an organization which is characterized by working environment conditions where there is a willingness of people including teachers in the school environment. to grow and develop. This statement is also in line with Damkuvienė, Valuckienė, & Balčiūnas (2019) that teachers who act and have good leadership skills can benefit study partners, promote institutional change, create and encourage a culture of shared learning in schools. Other analysis findings also manifest that distributed leadership by school principals indirectly influences the organizational learning environment and teacher self-efficacy which in this case can be mediated by teacher leadership (Damkuvienė et al., 2019).

Specifically, high student learning outcomes can be achieved by having an organizational learning culture in schools that supports and is determined by how the leadership is applied by teachers in the learning process inside and outside the classroom (Cherkowski, 2018; Printy & Liu, 2021; Wieczorek & Lear, 2018). On the other hand, it was also stated that student self-efficacy and teacher leadership are very important to motivate student learning, and vice versa if teacher leadership is not supportive, it will also have a negative impact on students' willingness or motivation to learn and achieve the expected academic results (Öqvist & Malmström, 2018).

Conclusion

Based on the research process of the SLR method that has been carried out, it can be concluded that teacher leadership plays an important role in improving and improving schools on an ongoing basis with various results found. Data obtained from databases in the last decade years, namely from 2013-2023, shows that research on teacher leadership has increased from year to year, especially in 2016 with. In the end, the implication of the teacher leadership in schools can be grouped in student learning, organizational learning, professional learning community which determines the instructional practice in the school. The rationale is that student learning can be achieved when the teacher as a leader in the class will practice an effective learning process when supported by organizational learning and professional learning community. The achievement of teacher leadership will certainly be influenced by the



leadership of the school principal so that it is known that it is important for the principal to know the methods used to improve teacher leadership. The limitation of this research is that researchers have not been able to find out what kind of effective development strategies and programs need to be taken by school principals in developing teacher leadership. So that the implications for the next research agenda emphasize what teacher leadership development programs are by school principals.

References

- Ankrum, R. J. (2016). Utilizing Teacher Leadership as a Catalyst for Change in Schools. *Journal of Educational Issues*, 2(1), 151. <https://doi.org/10.5296/jei.v2i1.9154>
- Cherkowski, S. (2018). Positive Teacher Leadership: Building Mindsets and Capacities to Grow Wellbeing. *International Journal of Teacher Leadership*, 9(1), 63–78.
- Coggins, C., & McGovern, K. (2014). Five goals for teacher leadership. *Phi Delta Kappan*, 95(7), 15–21. <https://doi.org/10.1177/003172171409500704>
- Curtis, R. (2013). Finding a New Way: Leveraging Teacher Leadership to Meet Unprecedented Demands. *Aspen Institute*, (February), 1–24.
- Damkuvienė, M., Valuckienė, J., & Balčiūnas, S. (2019). Teacher leadership for organizational change. *Management*, 24, 37–52. <https://doi.org/10.30924/mjcmi.24.si.3>
- Ding, Z., & Thien, L. M. (2022). Assessing the antecedents and consequences of teacher leadership: a partial least squares analysis. *International Journal of Leadership in Education*. <https://doi.org/10.1080/13603124.2022.2068191>
- Dufour, R. (2006). What Is a “ Professional Learning Community ”? *Educational Leadership*, 61(8), 6–11.
- Elfers, A., & Plecki, M. (2016). The role of a district teacher leadership program in supporting school and district improvement initiatives. *The WERA Educational Journal*, 9(1), 3–13.
- Fairman, J. C., & Mackenzie, S. V. (2015). How teacher leaders influence others and understand their leadership. *International Journal of Leadership in Education*, 18(1), 61–87. <https://doi.org/10.1080/13603124.2014.904002>
- Garcia Carrion, R., & García-Carrión, R. (2015). Transforming education through teacher leadership. *International Journal of Educational Leadership and Management*, 3(2), 219. <https://doi.org/10.17583/ijelm.2015.1588>
- Harris, A. (2002). Improving schools through teacher leadership. In *Education Journal*.
- Harris, A. (2005). Teacher Leadership: More than Just a Feel-Good Factor? *Leadership and Policy in Schools*, 4(3), 201–219. <https://doi.org/10.1080/15700760500244777>
- Harris, A., & Jones, M. (2019). Teacher leadership and educational change. *School Leadership and Management*, 39(2), 123–126. <https://doi.org/10.1080/13632434.2019.1574964>
- Jackson, T., Burrus, J., Bassett, K., & Roberts, R. D. (2010). Teacher Leadership: an Assessment Framework for an Emerging Area of Professional Practice. *ETS*



- Research Report Series*, 2010(2), i–41. <https://doi.org/10.1002/j.2333-8504.2010.tb02234.x>
- Katz, S., Earl, L., & Ben Jaafar, S. (2009). *Building and connecting learning communities: The power of networks for school improvement*. Canada: Corwin.
- Kilinç, A. Ç. (2014). Examining the relationship between teacher leadership and school climate. *Kuram ve Uygulamada Eğitim Bilimleri*, 14(5), 1729–1742. <https://doi.org/10.12738/estp.2014.5.2159>
- Kurt, T. (2016). A model to explain teacher leadership: The effects of distributed leadership model, organizational learning and teachers' sense of self-efficacy on teacher leadership. *Eğitim ve Bilim*, 41(183), 1–28. <https://doi.org/10.15390/EB.2016.5081>
- Lai, E., & Cheung, D. (2015). Enacting teacher leadership: The role of teachers in bringing about change. *Educational Management Administration & Leadership*, 43(5), 673–692. <https://doi.org/10.1177/1741143214535742>
- Langdon Warren, L. (2021). The Importance of Teacher Leadership Skills in the Classroom. *Education Journal*, 10(1), 8. <https://doi.org/10.11648/j.edu.20211001.12>
- Linde, K., & Willich, S. N. (2003). How objective are systematic reviews? Differences between reviews on complementary medicine. *Journal of the Royal Society of Medicine*, 96(1), 17–22. <https://doi.org/10.1258/jrsm.96.1.17>
- Lowery-Moore, H., Latimer, R. M., & Villate, V. M. (2016). The Essence of Teacher Leadership: A Phenomenological Inquiry of Professional Growth. *International Journal of Teacher Leadership*, 7(1), 391–397.
- Meredith, C., Moolenaar, N., Struyve, C., Vandecandelaere, M., Gielen, S., & Kyndt, E. (2022). The importance of a collaborative culture for teachers' job satisfaction and affective commitment. *European Journal of Psychology of Education*, 38, 43–62. <https://doi.org/10.1007/s10212-022-00598-w>
- Nguyen, D., Harris, A., & Ng, D. (2020). A review of the empirical research on teacher leadership (2003–2017): Evidence, patterns and implications. *Journal of Educational Administration*, 58(1), 60–80. <https://doi.org/10.1108/JEA-02-2018-0023>
- Ningsih, V. H., & Wijayanti, W. (2019). Teacher Leadership in Building Student Character: Educational Challenges in the 21st Century. *Atlantis-Press.Com*. <https://doi.org/10.2991/iccie-18.2019.90>
- Öqvist, A., & Malmström, M. (2018). What motivates students? A study on the effects of teacher leadership and students' self-efficacy. *International Journal of Leadership in Education*, 21(2), 155–175. <https://doi.org/10.1080/13603124.2017.1355480>
- Pang, N. S., & Miao, Z. (2017). The roles of teacher leadership in shanghai education success. *Current Business and Economics Driven Discourse and Education: Perspectives from Around the World*, 15, 93–100.



- Printy, S., & Liu, Y. (2020). Distributed Leadership Globally: The Interactive Nature of Principal and Teacher Leadership in 32 Countries. *Educational Administration Quarterly*, 57(2), 290–325. <https://doi.org/10.1177/0013161X20926548>
- Sales, A., Moliner, L., & Francisco Amat, A. (2017). Collaborative professional development for distributed teacher leadership towards school change. *School Leadership and Management*, 37(3), 254–266. <https://doi.org/10.1080/13632434.2016.1209176>
- Schott, C., van Roekel, H., & Tummers, L. G. (2020). Teacher leadership: A systematic review, methodological quality assessment and conceptual framework. *Educational Research Review*, 31, 100352. <https://doi.org/10.1016/j.edurev.2020.100352>
- Sebastian, J., Allensworth, E., & Huang, H. (2016). The role of teacher leadership in how principals influence classroom instruction and student learning. *American Journal of Education*, 123(1), 69–108. <https://doi.org/10.1086/688169>
- Sharar, T., & Nawab, A. (2020). Teachers' perceived teacher leadership practices: A case of private secondary schools in Lahore, Pakistan. *Social Sciences & Humanities Open*, 2(1), 100049. <https://doi.org/10.1016/j.ssaho.2020.100049>
- Sokol, A., Gozdek, A., & Figurska, I. (2015). The Importance of Teacher Leadership in Shaping the Creative Attitudes of Students. *Procedia - Social and Behavioral Sciences*, 197, 1976–1982. <https://doi.org/10.1016/j.sbspro.2015.07.569>
- Stoll, L., & Louis, K. S. (2008). *Professional learning communities: Divergence, depth and dilemmas*. Maidenhead: Open University Press and McGraw Hill Education.
- Sun, A., & Xia, J. (2018). Teacher-perceived distributed leadership, teacher self-efficacy and job satisfaction: A multilevel SEM approach using the 2013 TALIS data. *International Journal of Educational Research*, 92(September), 86–97. <https://doi.org/10.1016/j.ijer.2018.09.006>
- Tam, A. C. F. (2015). The role of a professional learning community in teacher change: A perspective from beliefs and practices. *Teachers and Teaching: Theory and Practice*, 21(1), 22–43. <https://doi.org/10.1080/13540602.2014.928122>
- Torres-Carrion, P. V., Gonzalez-Gonzalez, C. S., Aciar, S., & Rodriguez-Morales, G. (2018). Methodology for systematic literature review applied to engineering and education. *IEEE Global Engineering Education Conference, EDUCON, 2018-April*, 1364–1373. <https://doi.org/10.1109/EDUCON.2018.8363388>
- Valdez, M., Broin, A., & Carroll, K. (2015). Transforming Teacher Leadership to Help Students Succeed. *Untapped*, 1–32.
- Wieczorek, D., & Lear, J. (2018). Building the “Bridge”: Teacher Leadership for Learning and Distributed Organizational Capacity for Instructional Improvement. *International Journal of Teacher Leadership*, 9(2), 22–47.
- Wilson, S. J. (2016). Examining the Relationship Between Teacher Leadership Styles and Student Achievement. *Dissertation*.
- Xie, D., & Shen, J. (2013). Teacher leadership at different school levels: Findings and



implications from the 2003-04 Schools and Staffing Survey in US public schools.
International Journal of Leadership in Education, 16(3), 327–348.
<https://doi.org/10.1080/13603124.2012.690452>

York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255–316.
<https://doi.org/10.3102/00346543074003255>