Jurnal Paedagogy:
Jurnal Penelitian dan Pengembangan Pendidikan
https://e-journal.undikma.ac.id/index.php/pedagogy/index
Email:paedagogy@undikma.ac.id

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

Strengthening School Effectiveness Through Collaborative Working : An Evaluation of Training Impact

Yushi Widya Pramita*, Tjut Rifameutia
Faculty of Psychology, Universitas Indonesia.
*Corresponding Author. Email: pramithayushi.work@gmail.com

Abstract: This study aims to examine the effectiveness of experiential learning-based collaborative working training in enhancing the collaborative competence of stakeholders in elementary school setting. The research participant included of 15 stakeholders, comprising not only school leaders (such as principals and vice principals) but also foundation board members and teacher coordinators at SD X, a private school in Depok. The study employed a one-group pretest-posttest design with a quantitative approach and evaluated outcomes based on three levels of the Kirkpatrick model: reaction, learning, and behavior. The instruments used in this study included a knowledge pretest and posttest, as well as attitude questionnaire. Data analysis techniques consisted of descriptive statistics for the reaction data and non-parametric tests for analyzing the learning outcomes. The results of the reaction evaluation showed a high level of satisfaction with the facilitators and materials, although aspects of the methods and tools need improvement. The learning evaluation, using a Wilcoxon test, revealed a significant difference between pre-test and post-test scores ($p = 0.007$) with a large effect size ($r = 0.693$), indicating a significant increase in knowledge. The behavioral evaluation two weeks post-training showed positive attitudinal changes towards collaborative work within the school environment. These findings confirm that experiential learning-based training is effective in improving collaborative understanding and skills, and supports the achievement of school effectiveness in accordance with Marzano's Model.

Article History
Received: 19-05-2025
Revised: 22-06-2025
Accepted: 02-07-2025
Published: 25-07-2025

Key Words:
Collaboration;
Experiential Learning;
School Effectiveness;
Training.

How to Cite: Pramita, Y., & Rifameutia, T. (2025). Strengthening School Effectiveness Through Collaborative Working : An Evaluation of Training Impact. *Jurnal Paedagogy, 12*(3), 808-817. doi:https://doi.org/10.33394/jp.v12i3.16482

https://doi.org/10.33394/jp.v12i3.16482

Introduction

The concept of school effectiveness is crucial in education, referring to the extent a school achieves its goals in terms of student learning, development, and well-being (Leithwood et al., 2004). This concept is a critical factor in educational success, reflected in the accomplishment of learning objectives, holistic student development, and the welfare of the entire school community. School effectiveness can be measured through various indicators, such as academic achievement, student engagement levels, and teacher satisfaction. Various studies show that school effectiveness is significantly influenced by several factors, including strong leadership, a positive school culture, and the active involvement of all stakeholders (Leithwood et al., 2004; Javornik & Mirazchiyski, 2023). To achieve such effectiveness, effective school management becomes a key element, encompassing the management of curriculum, facilities, and educational resources that support the learning process (Ernawatie et al., 2023).

One of the essential requirements for achieving school effectiveness is the presence of strong collaboration among all stakeholders within the school. Marzano (2012) emphasizes that a safe, orderly, and supportive environment, an essential foundation of school

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

effectiveness, depends on collaborative practices. More than just a technical process, collaboration is a dynamic interpersonal skill that shapes how educators share ideas, solve problems, and work together (Friend & Cook, 2013). Research shows that when embedded in the school's professional culture, collaboration not only fosters a sense of collective responsibility and trust, but also enhances instructional consistency, inclusivity, responsiveness to student needs, and overall decision-making quality (Woodland et al., 2013; Ronfeldt et al., 2015; Tallman, 2020; Jacinto, 2022). Therefore, strengthening this competency is important for improving operational procedures but also for transforming the overall functioning of the educational community.

In the context of SD X, a private Islamic-modern elementary school in West Java, collaboration among educational stakeholders has a merge as a key area for development. A recent needs analysis at SD X reveals several institutional strengths, such as a clear vision and mission rooted in Islamic and modern values, the integration of technology in learning, active involvement of the Psychology Center in student development, and a supportive work culture enable by open leadership. However, despite these strenghts, stakeholders' collaboration remains underdeveloped. This is reflected in the lack of structured opportunities for collaborative planning, limited engagement from teaching assistants, unclear standard operating procedures (SOPs) regarding role distribution, and weak coordination across functional units. These issues have led to inefficient interventions for students and a lack of synergy in school governance. Teachers and support staff often work in silos, with minimal space for shared planning, reflection, or communication. Rather than viewing these challenges as dysfunctions, they can be seen as opportunities to intentionally build collaborative culture and strengthen communication systems. Developing collaboration skills becomes essential in ensuring that daily practices are aligned with the school's holistic mission and in supporting the school's long-term growth strategy.

Strong collaboration plays a vital role in improving school quality through the integration of perspectives, expertise, and resources. Previous research (Cabriga & Ching, 2024) indicates that higher stakeholder participation positively correlates with better school management and improved student learning outcomes. Conversely, low stakeholder involvement can impede achieving the school's vision and mission and negatively impact organizational performance. Given this, a training program focused on enhancing collaborative competences is urgently needed, not only to respond to the current challenges at SD X but also to build the foundation for a more effective and resilient school organization.

The synergy among principals, teachers, educational staff, students, and the surrounding community is a key determinant in realizing school effectiveness. A collaborative management process not only creates efficiency but also plays a role in increasing the overall effectiveness of the school organization (Ibrohim, 2016). Collaboration built on a foundation of mutual trust and respect allows all parties to voluntarily participate in efforts to improve educational quality (Slater, 2004). One of the main pillars supporting school effectiveness is planned and systematic collaboration among principals, teachers, support staff, parents, and external parties. This collaboration emphasizes teamwork that integrates the expertise of each individual to achieve common goals, and highlights the importance of open communication, mutual respect, and the integration of diverse perspectives to produce innovative solutions (Ismagulova, 2024; Palos, 2023). In other words, collaboration emphasizes equality, direct interaction, and voluntary involvement at every stage of the process, fostering productive and responsible working relationships (Friend & Cook, 2013). Collaboration among educators plays a strategic role in improving school

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

quality and student learning outcomes (Woodland et al., 2013). This form of collaboration is diverse, involving various parties with different areas of expertise, not just teachers.

In a professional context, collaboration should be viewed as an approach to interaction, not merely a separate technical activity. Collaboration reflects how individuals communicate and work together in carrying out tasks, such as co-teaching or discussing to support student development. By understanding collaboration as a style of interaction, open communication, equal cooperation, and reciprocal support become key elements in achieving common goals (Friend & Cook, 1992). Research indicates that a high level of collaboration positively impacts the quality of school management, more accurate data-driven decision-making, and improved student learning outcomes (Cabriga & Ching, 2024; Huffman & Kalnin, 2003).

Teachers and other educational staff who actively engage in collaborative activities can collectively analyze student data, share teaching strategies, and develop common assessments. This will create a more consistent and equitable learning experience for all students (Ronfeldt et al., 2015). Furthermore, a collaborative environment encourages teachers and other educational staff to reflect on their own practices, identify areas for improvement, and seek support from colleagues, thereby fostering continuous professional growth (Tallman, 2020). Increased involvement of teachers and other educational staff in strategic decision-making is also essential for fostering a positive school climate, building a sense of ownership, and encouraging shared responsibility for achieving the institution's vision and goals (Jacinto, 2022). This not only impacts organizational management but also creates a cooperative and inclusive work environment that supports a conducive learning atmosphere (Ross & Cozzens, 2016).

Additionally, more intensive support from the Psychology Center, owned by the School X Foundation, is needed, especially to help teachers effectively handle complex student issues. These findings indicate that optimizing collaboration among educators and providing adequate psychological support are strategic steps to strengthen school effectiveness based on the Marzano model.

Based on the identified needs, an intervention is required to strengthen collaboration among teachers and other educational staff and to deeply develop their interpersonal and professional skills. To address the challenges of modern education and support continuous professional development, an innovative andragogical strategy is necessary. One approach considered effective is experiential learning-based training, referencing Kolb's (2015) model. Experiential learning, as conceptualized by Kolb, offers a theoretical framework for understanding individual learning styles and provides a universal learning cycle that includes concrete experience, reflection, conceptualization, and active experimentation (Kolb, 2015). Through experiential learning-based training, teachers and other educational staff are expected to improve their ability to share ideas, build equitable teamwork, and develop the capacity to adaptively and reflectively address classroom dynamics. Thus, this intervention is expected to strengthen collaboration among educators and create a safe, orderly, and supportive learning environment as envisioned in Marzano's model of school effectiveness.

Although collaboration in schools has been widely discussed, most existing studies have yet to present structured programs that directly address the specific context of private schools in urban Indonesia. This study seeks to fill that gap by developing an experiential learning-based training program that is specifically designed to meet the unique needs, cultural values, and professional dynamics of SD X. In contrast to general approaches, this intervention translates the idea of collaboration into practical and trainable skills that reflect

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

the real challenges educators face in their daily work. By applying Kolb's experiential learning cycle, the study introduces a new and contextually relevant model for professional development—one that has not yet been implemented in similar educational settings. This study aims to examine the effectiveness of experiential learning-based collaborative working training in enhancing the collaborative competence of stakeholders in an elementary school setting.

Research Method

This research employed a quantitative approach with a one-group pretest-posttest design. The subjects of this study included all stakeholders at Elementary School X, consisting of a foundation administrator, the principal, vice-principal, teachers coordinator, Head of administration, and representatives from the school's psychological center. There were 15 participants selected through purposive sampling based on criteria of active involvement in school activities and direct roles in managing student development. The researcher was actively involved in the entire research process, from program development to final evaluation, which was conducted at Elementary School X.

At the preparation stage, the facilitator carefully designed the training sessions to align with adult learning principles and the experiential learning cycle (Kolb, 1984; 2015). The facilitator developed structured activities that followed the four stages of experiential learning: concrete experience, reflective observation, abstract conceptualization, and active experimentation. This approach aimed to provide participants with meaningful hands-on experiences while fostering reflection and theory integration. In addition, the training was planned using an andragogical framework that emphasized autonomy, relevance, and participant involvement in the learning process (Knowles, 1980; Merriam & Bierema, 2014). Materials prepared by the facilitator included interactive presentation slides, activity guidelines, role-play scenarios, and evaluation tools such as pre and postests as well as attitude questionnaires. Specific tools, such as origami paper for silent collaboration games and role description sheets, were also prepared to support each session. Furthermore, the facilitator took into account the background and organizational culture of the school to ensure the training content was contextually relevant and applicable. This thorough preparation highlights the critical role of the facilitator not only as a content deliverer but also as a learning experience designer and group dynamics manager who encourages active engagement and effective knowledge transfer.

The training module was designed based on Kolb's experiential learning framework, which integrates concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 2015). In the Concrete Experience (CE) stage, participants engaged in a group paper tower building activity without communication, aiming to present a real collaborative challenge. The Reflective Observation (RO) stage involved guided discussions with prompting questions, helping participants analyze their recent experiences. The Abstract Conceptualization (AC) stage comprised facilitator presentations covering the definition and benefits of collaboration (Friend & Cook, 2013), characteristics of collaboration such as voluntariness and equality, collaboration dynamics (trust, conflict, and diversity), and strategies for building a collaborative culture in schools (Peterson, 1994). The final stage, Active Experimentation (AE), involved role-playing based on scenarios of students experiencing learning and behavioral problems. In this simulation, participants discussed as a multidisciplinary team to develop a collaborative action plan, directly applying collaborative principles. Through this structured training process, participants were expected

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

not only to cognitively understand the concept of collaboration but also to internalize collaborative values in their professional behavior within the school environment.

The researcher evaluated the training program using three levels of the Kirkpatrick and Kirkpatrick (2006) evaluation model. The first level was reaction evaluation, where the training program was considered effective if participants showed a high level of satisfaction with the training attended. This evaluation was measured using an 8-item questionnaire, consisting of 6 items with a 6-point Likert type scale (1=strongly disagree, 6=strongly agree) and 2 other items with a 6-point Likert type scale (1=very poor, 6=very good), designed to evaluate participant satisfaction with the material, delivery methods, facilitator, and training aids. Example statements included, "The material presented in the training is relevant to my needs," "The exercises (case studies/role-play/etc.) provided at the beginning and end of the session helped to increase my understanding," "In my opinion, the facilitator's interaction with participants...?", and so on. Second, at the learning level, the evaluation focused on measuring the extent of participants' increased knowledge and understanding of the material presented in the training. This evaluation was conducted using a pretest and post-test method, structured as 10 true/false questions related to collaborative working concepts, covering topics such as the definition of collaboration, collaborative characteristics, collaboration dynamics, and the benefits of collaboration in a school environment.

Third, behavior evaluation focused on the application of training outcomes in the form of changes in participants' attitudes and behaviors in their work environment or daily lives. To evaluate this aspect, a follow-up was conducted by recirculating the questionnaire via Google Form two weeks after the training. This questionnaire consisted of 8 Likert scale items with points 1-5 (1 = strongly disagree, 5 = strongly agree) to measure the level of attitude and behavior change, as well as open-ended questions to obtain more in-depth and contextual information.

Analysis was conducted both quantitatively and qualitatively. The researcher used quantitative data analysis at each evaluation stage. For the learning evaluation, the obtained data were then analyzed using the Wilcoxon Signed-Rank test, as the data were paired (pretest and posttest from the same individuals) and not normally distributed based on normality test results. The Wilcoxon test was chosen as a non-parametric alternative to the paired t-test to determine if there was a significant difference between scores before and after the training. For the reaction and behavior evaluations from the questionnaires, the researcher used descriptive statistics. Qualitative analysis was performed to evaluate reactions and behaviors based on participants' responses to the completed questionnaires and provided open-ended questions.

Results and Discussion

The results of the evaluation at the first level, reaction evaluation, indicate that the training received a very positive response. The highest median score was obtained for the facilitator aspect (5.5), showing that participants rated the facilitator as highly competent in delivering material and facilitating discussions. The material aspect (5.25) suggests that participants found the content relevant, interesting, and aligned with their needs, indicating a high level of satisfaction and perceived usefulness of the training materials. Meanwhile, the methods and tools aspect (5) received the lowest score, indicating a need for more varied and effective strategies in using tools and teaching methods. This aligns with recent findings emphasizing the importance of interactive facilitation and reflective discussion to improve learning engagement and outcomes (Darling-Hammond et al., 2017; Mizell, 2021).

Jurnal Paedagogy:
Jurnal Penelitian dan Pengembangan Pendidikan
https://e-journal.undikma.ac.id/index.php/pedagogy/index
Email:paedagogy@undikma.ac.id

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

Tabel 1. Median Scores of Reaction Evaluation Results

Aspect	Median
Materials	5.25
Methods & Tools	5
Facilitator	5.5

At the second level, learning evaluation, the results of the Wilcoxon Signed-Rank test indicate a difference between pretest and post-test scores. The Ranks table shows that 10 participants had positive ranks, meaning their post-test scores were higher than their pretest scores. Conversely, only 1 participant had a negative rank, where the post-test score was lower than the pretest score, and 4 participants had ties, meaning their pretest and post-test scores were the same. These results suggest that the majority of participants experienced an increase in scores after the training, serving as an initial indication that the intervention or training provided tends to be effective in improving participants' knowledge or skills related to collaborative working.

Based on the Wilcoxon Signed-Rank Test results, a significant difference was found between pretest and post-test scores ($p = 0.007$; $Z = -2.683$), indicating that the collaborative working training had a significant impact on enhancing participants' understanding or skills. The positive direction of change is reflected in the generally higher post-test scores. The generally higher post-test scores reflect a positive direction of learning improvement, particularly in areas related to collaboration and facilitation (Kraft et al., 2018).

Tabel 2. Wilcoxon Signed-Rank Test

		N	*Z*	*Asym. Sig. (2-tailed)*
Post-Pre	*Negative ranks*	1	-2.683	.007*
	Positive ranks	10		
	Ties	4		
	Total	15		

**Asym. Sig. (t2-tailed) < .05*

Additionally, the effect size value of 0.693 falls into the large effect category, indicating that the training had a strong impact on participants' collaborative abilities. This improvement is supported by the use of experiential learning approaches, such as simulations, group discussions, and role-playing, which provide direct and relevant learning experiences. This approach aligns with the theories of Kolb (1984) and Knowles (1980), who emphasize the importance of real-world experience in adult learning processes.

Next, at the behavioral level, an evaluation was conducted on participants' changes in attitude and behavior after the training. The median score for the aspect of understanding the importance of collaborative working concepts was 4.5, indicating that participants well understood the urgency and benefits of collaborative work within the school context. Their attitude towards collaborative working received a median of 4, reflecting a positive change in participants' perspectives on professional cooperation. Similarly, the aspect of applying collaborative principles received a median score of 4, signifying that participants began integrating these principles into their daily work practices.

Jurnal Paedagogy:
Jurnal Penelitian dan Pengembangan Pendidikan
https://e-journal.undikma.ac.id/index.php/pedagogy/index
Email:paedagogy@undikma.ac.id

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

This behavioral shift was further supported by qualitative data, where participants reported initiating collaborative lesson planning, taking active roles in discussions, and enhancing communication and coordination among team members. These behavioral changes are consistent with findings by Cordingley et al. (2020)**,** who argue that experiential and reflective training approaches, are effective in promoting meaningful behavioral change in professional development programs. These methods are aligned with adult learning theories that emphasize real-world application and experiential engagement as key to internalizing new practices (Knowles et al., 2020).

Tabel 3. Median Scores of Behavioral Evaluation Results

Aspek	Median
Understanding the importance of the concept of collaborative working and its significance in a school context.	4.5
Demonstrating a positive attitude towards collaborative working.	4
Applying collaborative working principles, understanding collaborative working dynamics, and overcoming challenges encountered.	4

School characteristics such as a reflective culture, open communication structure, mentorship practices, and the involvement of various stakeholders indicate that SD X has a strong foundation for implementing collaborative working in the workplace. While collaboration offers many benefits, Although collaboration offers many benefits, some participants also identified several challenges that hinder the optimization of collaborative practices. One of these challenges is differences in opinion that may lead to miscommunication, as well as unequal levels of understanding and initiative regarding the importance of collaboration. There are still individuals who tend to prefer working independently. Therefore, efforts are needed to encourage openness and courage among all team members to collaborate, so that the collaborative process can run more effectively. A work culture that focuses too much on personal interests can reduce the effectiveness of teamwork, making it necessary to encourage a spirit of collaboration with shared goals and mutual respect (Riley, 1997). Additionally, ineffective communication and scheduling conflicts are common hurdles in implementing collaborative work. These obstacles need to be addressed through appropriate strategic management to ensure that the work process continues efficiently (McCarthy, 2023; Riley, 1997).

These challenges highlight the need for additional strategies to comprehensively strengthen the collaborative culture. Some effective strategies include advanced training that focuses on collaborative skills and the development of healthy working relationships, ongoing mentorship, and performance monitoring within teams. Such training can better prepare individuals to work effectively in teams (McCarthy, 2023). Additionally, continuous mentorship and feedback are essential for reinforcing collaborative practices and addressing emerging obstacles (Durante, 2022; Dean, 2010). By implementing a balanced approach between individual and collective responsibility, a collaborative work environment can grow more systemically and sustainably.

The findings of this study suggest valuable directions for future development and broader application. Conceptually, the results highlight the potential of using a contextual

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

Professional Learning Community (PLC) training model as a reference applicable across various levels, whether among teachers or in multi-level collaborations (Stoll et al., 2006).

Furthermore, the study provides insight into how experiential learning approaches, such as Kolb's Learning Cycle, can be effectively applied to foster essential soft skills among educators, including collaboration, communication, and empathy (Kolb, 1984; Illeris, 2018). From a practical standpoint, the training design can be further refined by incorporating real-life simulations that mirror challenges often encountered in school collaborations, such as role conflicts or miscommunication in addressing student needs. Additionally, this program can serve as a reference for schools and policymakers to adopt similar training, particularly for preservice teachers or students in teacher education programs. It emphasizes that working in schools requires not only pedagogical knowledge but also the ability to collaborate effectively within educational teams (Avalos, 2011; Darling-Hammond et al., 2017).

Conclusion

Collaborative working training proved effective in enhancing participants' understanding of collaborative work through an experiential learning approach. The significant increase in knowledge scores indicates that participants were able to better grasp the principles, characteristics, and dynamics of collaboration. This activity provides a strong foundation for strengthening a collaborative culture within the elementary school environment, ultimately contributing to an overall improvement in the quality of education.

Recommendation

For future research, it would be beneficial to examine how this type of training affects outcomes over a more extended period. Researchers can use follow-up assessments several months after the training to determine if the improvements are sustained. Including more participants and comparing them with a group that didn't receive the training can also make the results more reliable. Future studies may also investigate how factors such as leadership style, school structure, and culture impact the effectiveness of collaboration. It would also be beneficial to explore how digital tools can facilitate teamwork, particularly in online or blended learning environments.

For School X, several practical steps can be taken based on the findings of this study. The school principal can help create a more collaborative environment by encouraging open communication and shared decision-making. Regular planning meetings across different roles and peer support systems can make collaboration part of the school's daily routine. Teachers and team leaders should be given space and support to continue discussions, share ideas, and solve problems together, such as through Professional Learning Communities (PLCs). Administrative staff and the school foundation should provide sufficient time, tools, and support to facilitate easier collaboration. For example, allocating time during working hours for teachers to collaborate and incorporating collaboration into performance reviews can help make it part of the school culture. Ongoing mentoring and regular follow-up meetings will also help strengthen collaboration over time.

Specifically for School X, stronger collaboration is recommended between teachers, the Psychology Center, and administrative staff to enable more comprehensive student assessments. A collaborative data-sharing system that integrates academic, psychological, and behavioral information would help produce more targeted and responsive interventions for students. By leveraging multidisciplinary insights, School X can ensure that student development is addressed holistically, aligning with the school's vision of fostering academic

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

excellence, emotional growth, and ethical character. These strategies are essential to ensure that the training outcomes are sustained over time and that collaborative practices become an integral part of the school's efforts to enhance overall effectiveness and student success.

References

Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, *27*(1), 10-20.

Cabriga, A. A. C., & Ching, D. A. (2024). Collaboration and Partnership among Stakeholders towards Management of Public Elementary Schools. TWIST, 19(3), 552-558.

Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., ... & Coe, R. (2020). *Developing Great Teaching: Lessons from the International Reviews into Effective Professional Development*. Education Endowment Foundation.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Learning Policy Institute.

Ernawatie, N., Wisman, Y., & Syarif, A. (2023). Manajemen Sekolah Dalam Meningkatkan Mutu Pendidikan Pada Tingkat SD. Jurnal Ilmiah Kanderang Tingang, 14(2), 410–418.

Friend, M., & Cook, L. (2013). Interactions: Collaboration skills for school professionals. 7ed. Pearson Education

Huffman, D., & Kalnin, J. (2003). Collaborative inquiry to make data-based decisions in schools. Teaching and Teacher Education, 19(6), 569-580.

Illeris, K. (2018). An overview of the history of learning theory. *European Journal of Education*, *53*(1), 86-101.

Ismagulova, Z.S., (2024). Joint Group Work Is an Effective Way of Organizing Practical Work in Pedagogical Disciplines. doi:10.47526/2024-1/2664-0686.29

Jacinto, R. Q. (2022). Examining the School Climate and Teachers' Commitment to the Teaching Profession: Basis for a Supplementary Support Program. *International Journal of Multidisciplinary: Applied Business and Education Research*, *3*(8), 1564-1568.

Javornik, Š., & Klemenčič Mirazchiyski, E. (2023). Factors Contributing to School Effectiveness: A Systematic Literature Review. European Journal of Investigation in Health, Psychology and Education, 13(10), 2095-2111.

Kirkpatrick, D., & Kirkpatrick, J. (2006). Evaluating training programs: The four levels. Berrett-Koehler Publishers

Knowles, M. S. (1980). From pedagogy to andragogy. Religious Education, 42-49.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2020). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (9th ed.). Routledge.

Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development.

Kolb, D.A. (2015) Experiential Learning: Experience as the Source of Learning and Development. 2nd Edition, Pearson Education, Inc.

Kraft, M. A., Blazar, D., & Hogan, D. (2018). *The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence*. *Review of Educational Research*, 88(4), 547–588.

Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning. Review of research. Wallace Foundation.

Vol. 12 No. 3 : July 2025
E-ISSN: 2722-4627
pp. 808-817

McCarthy, T. M. (2023). 7 Collaboration, reciprocity, and challenges: Professional development-in-practice. *Collaborative Research in Language Education: Reciprocal Benefits and Challenges*, *20*, 101.

Mizell, H. (2021). *Why professional development matters*. Learning Forward.

Perković Paloš, A. (2023). Collaborative Working. In *A Guide to Responsible Research* (pp. 83-91). Cham: Springer International Publishing.

Peterson, K. D., & Brietzke, R. (1994). Building Collaborative Cultures: Seeking Ways To Reshape Urban Schools. Urban Monograph Series.

Riley, K. (1997). Changes in local governance—collaboration through networks: A post-16 case study. *Educational Management & Administration*, *25*(2), 155-167.

Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American educational research journal*, *52*(3), 475-514.

Ross, D. J., & Cozzens, J. A. (2016). The principalship: essential core competencies for instructional leadership and its impact on school climate. *Journal of Education and training Studies*, *4*(9), 162-176.

Slater, L. (2004). Collaboration: A Framework for School Improvement, 8 (5). IEJLL: International Electronic Journal for Leadership in Learning.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of educational change*, *7*(4), 221-258.

Tallman, T. O. (2021). How teachers experience collaboration. *Journal of Education*, *201*(3), 210-224.

Vangrieken, K., Meredith, C., Packer, T., & Kyndt, E. (2017). Teacher communities as a context for professional development: A systematic review. *Teaching and teacher education*, *61*, 47-59.

Woodland, R., Lee, M. K., & Randall, J. (2013). A validation study of the teacher collaboration assessment survey. Educational Research and Evaluation, 19(5), 442–460. https://doi.org/10.1080/13803611.2013.795118.

