

## The Spirit of Group Cooperation of Teachers as an Educational Necessity of Schools: A Review Study

S. Rohollah Moosavinejad<sup>1</sup> , Hoosein Karimian<sup>2</sup> , S. Mohammad Bagher Jaafari<sup>3</sup> 

1. PhD student, Department of Educational Management, Qom Branch, Islamic Azad University, Qom, Iran

2. Assistant Professor, Department of Educational Management, Qom Branch, Islamic Azad University, Qom, Iran,

[hosein.karimian46@yahoo.com](mailto:hosein.karimian46@yahoo.com)

3. Farabi Campus, Faculty of Management and Accounting, University of Tehran, Tehran, Iran

### Article Info

#### Article type:

Review Article

#### Article history:

Received 15 Jan. 2024

Received in revised form 29

Mar. 2024

Accepted 14 Jun. 2024

Published online 01 Mar. 2025

#### Keywords:

Spirit of group cooperation,  
Teachers,  
Schools,  
Systematic review

### ABSTRACT

**Objective:** In order for the realm of education to advance, it is imperative that the stakeholders engaged in this field, particularly educators who maintain substantial interaction with students, undergo transformation. The objective of the present study is to systematically review scholarly works pertinent to the essence of collective collaboration among educators as an educational imperative within academic institutions.

**Methods:** In the course of a systematic examination, approximately 14 studies authored by Iranian researchers and around 20 studies by non-Iranian researchers were analyzed. The selected studies were exclusively those published in esteemed Iranian journals and in journals indexed within the Scopus and JCR databases from the years 2010 to 2023.

**Results:** A majority of the studies concentrated on elucidating the definition of the essence of collaboration, as well as the impact of this collaborative spirit on both individual and organizational variables. Furthermore, in most of the analyzed research, educators were utilized as the primary subjects of study. Employee performance, learning and development, creativity, job motivation, and job satisfaction emerged as the most significant variables investigated within these studies, all of which were demonstrated to be affected by the essence of collaboration.

**Conclusions:** Overall, the findings of this research corroborated the essence of collective collaboration as an educational necessity within academic institutions and indicated that such collaboration has the potential to enhance both individual and organizational variables, particularly among educators.

**Cite this article:** Moosavinejad, S. R., Karimian, H. & Jaafari, M. B. (2025). The spirit of group cooperation of teachers as an educational necessity of schools: A Review Study. *Iranian Journal of Educational Research*, 4 (1), 89-102.

DOI: <https://doi.org/10.22034/4.1.89>



© The Author(s).

DOI: <https://doi.org/10.22034/4.1.89>

Publisher: University of Hormozgan.

## Introduction

Enhancing the quality of education necessitates a more rigorous examination of the methodologies employed to attain educational outcomes and objectives. The advancement of educational institutions can only be sustained through the concurrent development of their personnel, implying that the enhancement of student learning is intrinsically linked to the growth and caliber of educators ([Abdollahi & Azizi Shamami, 2012](#)). Educators serve as pivotal elements in the elevation of student performance, as the enhancement of education is inextricably tied to the improvement of teachers. Consequently, the primary emphasis of professional development initiatives is directed at educators to augment their efficacy within educational settings ([Arthur et al., 2006](#)). Nonetheless, the focus and caliber of professional development programs exhibit considerable variability, with numerous programs failing to elevate teacher efficacy and, by extension, student learning outcomes ([Wallace Jr, 1996](#)). Furthermore, school administrators persist in offering ineffective professional development programs for educators. They often confine professional development to a series of brief courses or discontinuous and non-practical training workshops ([Guskey, 2000](#)). In summary, existing research indicates that teacher professional development, in its present iteration, has exerted minimal influence on pedagogical methods, school organization, and student curricula ([Díaz-Maggioli, 2004](#)). A professional development program for educators will be most efficacious when it is customized to address the specific requirements of teachers, schools, and educational systems, particularly those learning programs that are aligned with the needs, capabilities, and characteristics of students ([Jerez et al., 2021](#)).

In contemporary pedagogical approaches, there is a pronounced emphasis on establishing a long-term, school-centered, research-oriented, or learner-centered framework that supports teachers as they collaboratively strive to cultivate the professional knowledge requisite for their roles ([Abbas & Marhamah, 2020](#)). Collaboration is fundamental to the establishment of a successful educational institution and the enhancement of student achievement ([Eddy, 2010](#)). Therefore, one effective strategy for augmenting teachers' knowledge and expertise is through collaborative professional development. Collaborative professional development effectively addresses numerous deficiencies and limitations inherent in traditional in-service training programs. The implementation of this training modality fosters the development of relationships among

educators, cultivates trust, and allows for the interrogation or affirmation of shared ideas and beliefs within a secure environment ([Yazdanpanah et al., 2023](#)). When educators forge connections with one another, a robust sense of community begins to emerge, transforming the school culture into a collective ethos rather than an individualistic one ([Safari et al., 2018](#)). Engaging in collaborative learning promotes higher levels of success and retention compared to competitive and individualistic endeavors, as the latter often stifle progress and achievement by isolating and segregating learners from one another ([Palloff & Pratt, 2010](#); [Rafiei Taba Zavareh et al., 2022](#); [Torabi Nia et al., 2023](#)).

Collaboration encompasses an awareness among teachers, administrators, and staff of all facets of the learning process pertinent to the educational collective. Various teams composed of educators, administrators, and support personnel may be established in accordance with their specialized knowledge, with each team tackling a distinct aspect of professional development. Upon the establishment of these teams, they may either function on an ongoing basis or operate solely as circumstances necessitate ([Liao et al., 2015](#)).

Scholarly discourse indicates that merely patching the existing system proves to be ineffective. Researchers advocate for a transformative shift in the fundamental nature of professional development for educators. Such a shift is imperative to engage teachers as accountable and reflective practitioners in the ongoing refinement of their knowledge and skills, as well as to facilitate instructional methodologies that enhance student engagement at elevated levels of cognitive functioning and empower educators in leadership capacities within their institutions ([Shirzadegan, 2013](#)).

Collective learning signifies the cognitive synergy achieved through the acquisition of skills in dialogue and discourse among peers. Indeed, the genesis of team learning is rooted in dialogue. It is crucial to recognize that team learning constitutes a collective competency ([Jerez et al., 2021](#)). Learning cohorts cultivate the ability to learn collaboratively. Undoubtedly, it can be posited that the enhancement of group capabilities presents a more formidable challenge than the enhancement of individual competencies. This necessitates that inclusive groups engage in experiential contexts to cultivate their collective learning capabilities. The absence of meaningful practice constitutes a principal barrier that inhibits the majority of management teams from evolving into productive learning units ([He et al., 2023](#)).

Participatory professional development groups effectively address the inadequacies and limitations inherent in traditional professional development frameworks. Given that the program is administered by its members, the ownership of participatory professional development is unequivocally retained by educators ([Shirzadegan, 2013](#)). Collaborative learning necessitates the possession of values and behavioral paradigms essential for fostering learning, the most critical of which include a focus on the group as a cohesive entity, appreciation and respect for all members, prioritization of teamwork, acceptance of failures, emphasis on interpersonal relationships and collaboration, as well as receptiveness to feedback and constructive criticism ([Baker, 2015](#); [Laal & Laal, 2012](#); [Nokes-Malach et al., 2015](#)).

Despite recognizing the significance of collaborative efforts among educators in fostering a supportive learning environment, the execution of team collaboration within educational institutions remains inconsistent. The influence of team collaboration on pivotal educational variables, such as teacher performance, job satisfaction, creativity, and organizational advancement ([Laschinger et al., 2001](#); [Ronfeldt et al., 2015](#); [Ross & Gray, 2006](#)), is well-documented; yet, a comprehensive integration of this concept into educational practices is notably absent. Moreover, while numerous investigations underscore the importance of teacher collaboration, a considerable number of schools continue to function with isolated teaching practices, thereby undermining the prospective advantages of collaboration. This study seeks to rectify this deficiency by systematically reviewing extant research to elucidate how team collaboration among educators represents an educational imperative and how its effective integration can influence individual teacher outcomes and broader organizational development within schools. Consequently, the objective of the current study is to systematically review research pertaining to team collaboration among educators as an educational imperative within the school context.

### Material and Methods

This investigation employs a systematic review methodology to scrutinize the extant literature pertaining to the essence of teamwork among educators as an essential component of educational frameworks within academic institutions. The subsequent procedural steps were undertaken to guarantee a thorough and methodologically sound review process:

### 1 .Search strategy

This review concentrated on empirical studies disseminated between the years 2010 and 2023. Two distinct databases were utilized to extract pertinent studies: Iranian scholarly journals and international journals cataloged in Scopus and JCR. The search employed keywords such as teamwork ethos, educator collaboration, school cooperation, and educational teamwork. Articles published in both English and Persian were incorporated into this review.

2 .Selection of studies: A total of 34 studies were discerned and integrated into the review: 14 studies conducted by Iranian researchers and 20 studies executed by researchers from other countries. The criteria for inclusion in the study were as follows:

- Empirical research published in esteemed journals.

- Investigations that concentrated on the teachers' collaborative spirit and its ramifications on educational variables.

- Publications dated between 2010 and 2023.

- Articles sourced from reputable Iranian journals and international journals indexed in Scopus and JCR.

- Studies that did not emphasize the collaborative dimension of teacher engagement or lacked theoretical empirical data were systematically excluded.

### 3 .Data extraction

Data were meticulously extracted from each selected study to delineate key variables, encompassing the definition of collaborative spirit, its influence on individual and organizational factors, and any specific outcomes pertinent to teacher performance, creativity, job motivation, job satisfaction, learning, and development. A standardized data extraction template was devised to ensure uniformity in the capture of relevant information from each article.

### 4 .Data analysis

Data were subjected to qualitative content analysis. The studies were categorized according to focal areas (individual variables, organizational variables) and geographical context (Iranian versus non-Iranian studies). Emerging patterns, similarities, and distinctions were accentuated to furnish a comprehensive understanding of how the collaborative spirit influences educators and educational institutions across diverse contexts.

## 5 .Synthesis of Results

The findings extracted from the selected studies were synthesized to unveil themes, trends, and overarching gaps within the research. Particular emphasis was placed on the effect of group collaboration on critical educational variables such as teacher creativity, job motivation, and overall performance. The objective of this synthesis was to evaluate whether a collaborative spirit among educators can be regarded as a universal necessity for academic institutions and to elucidate how its impacts may differ based on regional or organizational contexts.

## Results

The investigations delineated in Table 1 encompass scholarly works from Iran, whereas the inquiries enumerated in Table 2 pertain to international studies focused on the essence of teamwork, which are encapsulated in the principal segments of each respective study.

**Table 1.** Selection of Iranian Investigations

Author/year	Title	Methodology	Results
Abdolhamid et al. (2023)	Achievements and functions of the participatory management approach in the higher education system	Qualitative study	By analyzing the findings, it was concluded that the functions and achievements of participatory governance in higher education can be classified into six categories: 1- Promoting coordination, coherence, and integration; 2- Strengthening communication, building trust, and increasing participation and decentralization in decision-making; 3- Increasing efficiency and effectiveness (through collaboration); 4- Increasing learning and free access to information to help facilitate the implementation and execution of policies; 5- Increasing accountability and greater transparency and reducing disputes; 6- Increasing commitment and a sense of responsibility.
Belkameh & Ansari (2022)	The effectiveness of work and technology education in creating self-regulation and increasing the spirit of cooperation in junior high school students	Quantitative – SEM	That teaching work and technology has a significant effect on creating self-discipline and the components of homework value and test anxiety in students. Also, teaching work and technology has a significant effect on creating a spirit of cooperation in students.
Esmaeili et al. (2020)	Analyzing the role of organizational trust, cooperation among teachers, and collaborative decision-making on teachers' teaching activity mediated by teachers' self-efficacy	Quantitative – SEM	Teaching activity today is more than just the transfer of knowledge and teaching is the focus of every curriculum and is considered at all levels of education. Therefore, effective teaching has always been a vital element of learning and requires revisions in teaching. Although it is expected that education and training will improve the level of educational activities at the school level and teaching methods.
Ghasemian Dastjerdi et al. (2020)	Explaining the structural relationship between knowledge sharing and the effectiveness of school educational groups with the mediating role of trust and intra-group cooperation.	Quantitative – SEM	Knowledge sharing, trust, and cooperation within the group will increase the effectiveness of school teaching groups, which in turn will improve and promote education. Knowledge sharing in teaching groups, with close cooperation and trust between teachers in return for this knowledge sharing and cooperation in the information exchanged, will increase the effectiveness and performance

Shahvaisy et al. (2020)	The effect of the spirit of cooperation on the productivity of elementary school teachers in Sar-e-Pul-e-Zahab city.	Quantitative – SEM	of teachers, which in turn will lead to their professional growth and development, and the results of the work will be reflected in improving the situation of empowering students.
			In education, the most important role is played by human resources, and the teacher is one of the most important factors in the qualitative and content development of education, because human education is the result of a mutual and two-way interaction and ultimately the result of the teacher's actions and the student's reactions.

**Table 2.** Selection of International Investigations

Author/year	Title	Methodology	Results
Desta et al. (2023)	The status of teachers' collaboration in Ethiopian public universities found in the Amhara region	Qualitative	The findings of this study showed that university teachers found in the Amhara region were moderately involved in information sharing and informal collaboration/collaborative relationships. However, the collaboration of teachers in professional activities did not seem satisfactory. The results of this study also showed that there was a significant difference between the four generations of university teachers. Therefore, Ethiopian public universities found in the Amhara region should pay sufficient attention to strengthening collaboration between teachers in professional activities.
Rais & Rubini (2022).	Increasing Creativity Strengthening Transformational Leadership, Teamwork, and Work Engagement Teacher through	Quantitative	The results showed that teamwork that emphasizes group goals, active participation of members, prioritizing each other, communicating with each other, complementing each other, and sharing can improve the quality of teacher services.
Razzaghi et al. (2022)	Investigating the Effect of Organizational Culture and Team Work on Teachers' job Performance Emphasizing the Mediating Role of Professional Ethics	Quantitative	This study showed that organizational culture, teamwork, and professional ethics play an effective role in teachers' job performance, and to improve and enhance teachers' job performance, attention should also be paid to these factors.
Plotnikova & Strukov (2019)	Integration of teamwork and critical thinking skills in the process of teaching students	Mixed method	Schools should have new professional thinking, high mobility, competence, tolerance and focus on intragroup activities carried out in a team. With the team form of education organization, an environment is created that allows students to master not only the skills and abilities of business interaction and cooperation, but also their critical thinking abilities, which include the ability to think creatively, use new information and apply knowledge in practice.
Gautam (2018)	Team effectiveness and perceived employees' performance in Nepalese service sector.	Quantitative – SEM	This study shows that team plays a significant role in employee performance which leads to better performance of the organization. To create and implement effective team, the management system should be designed according to the team environment to increase productivity. Various factors such as supportive environment, team reward and cohesion affect team effectiveness which ultimately leads to better employee performance.

Through the systematic analysis of the inquiries outlined in Tables 1 and 2, numerous pivotal insights were elucidated regarding the imperative of cultivating a spirit of teamwork among



educators as an essential educational requisite within academic institutions. The resultant findings can be encapsulated in the subsequent principal themes:

**1. Definition and Comprehension of Teamwork:** Throughout the reviewed literature, a uniform comprehension of "teamwork" emerged as a fundamental cultural and organizational construct, encompassing mutual collaboration, shared objectives, and collective decision-making among educators. Teamwork is conceptualized as a dynamic continuum wherein teachers collaborate to promote both individual and organizational advancement, thereby enhancing the overall educational quality.

**2. Influence on Individual Variables:** A multitude of the scrutinized studies underscored the affirmative influence of educator collaboration on individual-level outcomes. The following variables were further elucidated:

-Job motivation: Educators engaging in collaborative efforts exhibited markedly elevated levels of motivation. The support and shared accountability among peers fostered a sense of belonging and dedication to their pedagogical responsibilities.

-Creativity and innovation: Educators participating in collaborative methodologies demonstrated heightened creativity within their instructional strategies. The exchange of ideas and collaborative problem-solving invigorated innovation in classroom practices and curriculum design.

-Job satisfaction: Numerous investigations have indicated that a collaborative ethos enhances job satisfaction. Educators reported elevated levels of satisfaction attributable to the emotional encouragement, diminished workload, and constructive work environment engendered by teamwork.

-Teacher performance: An ethos of collaboration has been evidenced to bolster teacher performance. Engaging with colleagues enables educators to exchange exemplary practices, obtain constructive criticism, and perpetually enhance their pedagogical competencies.

**3. Impact on Organizational Variables:** The investigation revealed that a collaborative ethos among educators exerts a considerable influence on organizational advancement and the efficacy of academic institutions. The principal organizational outcomes delineated encompass:

-Learning and Growth: Educational institutions that cultivated a collaborative ethos experienced enhancements in organizational learning and developmental trajectories. Educators, as pivotal



figures within the academic milieu, were empowered to engage collectively in school-wide initiatives, thereby contributing to the establishment of a more effective learning organization.

-Staff Performance: Collective endeavors at the organizational level culminated in enhancements to overall staff performance metrics. Academic institutions that promoted teamwork among educators observed improvements not solely in the performance of individual educators but also in the collective performance of the institution itself.

-Positive School Climate: A collaborative spirit engendered a more favorable school climate, which consequently exerted a beneficial influence on student academic performance and the professional well-being of educators. Such collaboration mitigated teacher isolation and fostered a nurturing environment conducive to professional development.

**4 .Geographical and Contextual Differences:** The findings exhibited discrepancies between the results of Iranian and non-Iranian research. Although both categories of studies underscored the advantageous effects of collaboration, Iranian research frequently accentuates the obstacles encountered in cultivating collaborative atmospheres, attributable to hierarchical frameworks and cultural paradigms. Conversely, non-Iranian studies, particularly those situated within Western contexts, tend to concentrate on established collaboration models such as professional learning communities (PLCs) or team teaching methodologies, which are more institutionalized within these geographical areas.

## Discussion

A comprehensive review of the extant literature underscores the critical significance of a collaborative spirit among educators as a vital element in enhancing both individual and organizational outcomes within educational settings. Educators who partake in collaborative endeavors report elevated levels of job motivation, creativity, and satisfaction, consequently leading to heightened performance levels. At the organizational level, a culture of collaboration engenders a positive school climate, facilitates collective learning, and promotes holistic growth, thereby engendering a more effective teaching milieu. These findings reinforce the notion that teaching is inherently a communal undertaking and that the success of educators is intricately connected to the support derived from their colleagues. By fostering a collaborative spirit, educational institutions can cultivate an environment wherein educators are more engaged,

innovative, and dedicated to their professional responsibilities. Significantly, this collaborative ethos not only benefits individual educators but also contributes to the collective success of the institution as a whole.

Nevertheless, the review has elucidated significant barriers to the formation of a robust collaborative culture within educational institutions, which encompass temporal constraints, inadequate administrative support, and cultural opposition. These challenges suggest that, despite the myriad advantages associated with collaboration, it requires systemic endorsement and transformative alterations.

This review presents compelling evidence that a collaborative ethos among educators is imperative for the progression of educational institutions. Educators who engage in collaborative practices with their peers exhibit heightened motivation, job satisfaction, creativity, and overall performance in their professional roles. Likewise, educational establishments that nurture a culture of collaboration witness organizational advancement, enhanced learning, and a favorable work environment. These findings underscore the significance of collaboration not merely as a mechanism for the professional development of individual educators but also as a strategic framework for enhancing overall institutional efficacy. While the advantages of teamwork are well-documented, it is essential for schools to confront the obstacles that impede effective collaboration. Administrative endorsement, effective time management, and cultural transformation are fundamental in fostering a collaborative atmosphere that is advantageous for both educators and learners.

### **Limitations**

1. Geographical focus: The review predominantly concentrated on studies originating from Iran and nations with journals indexed in Scopus and GCR, thereby constraining the generalizability of the findings to other geographical areas and educational frameworks characterized by diverse cultural and organizational paradigms.
2. Time frame: This review exclusively encompassed studies published between 2010 and 2023, which may have inadvertently excluded research from preceding years that could have enriched the understanding of the subject matter.
3. Publication bias: The dependence on peer-reviewed journals may have resulted in the introduction of publication bias, as studies yielding positive outcomes are more predisposed to

publication. This phenomenon could skew the findings toward an excessively optimistic perspective regarding the merits of collaboration.

4. Lack of quantitative meta-analysis: This review synthesized qualitative findings without the execution of a meta-analysis, which could have afforded more accurate estimations of the influence of group collaboration on specific variables such as educator performance and job satisfaction.

### **Suggestions for future research and practice**

1. Expand geographical scope: Subsequent inquiries should encompass research from a broader array of countries and educational systems to investigate how cultural and contextual variables affect the efficacy of teacher collaboration.

2. Exploring administrative roles: Additional research is warranted to elucidate the influence of school leadership on the facilitation or obstruction of group collaboration. Investigations should focus on how principals and administrators can devise structures and policies that foster a collaborative spirit.

3. Longitudinal studies: Extended studies would be beneficial to monitor the enduring impact of teacher collaboration on both individual and organizational outcomes over time. This approach would assist in clarifying whether the advantages of collaboration are transient or enduring.

4. Developing collaborative frameworks: Educational institutions should implement structured frameworks for teacher collaboration, such as professional learning communities (PLCs) or team training initiatives, to furnish educators with explicit guidelines and support for collaborative endeavors.

By addressing these limitations and executing targeted strategies, educational institutions can optimize the advantages of group collaboration, culminating in enhanced educational outcomes for teachers, students, and the institutions as a collective entity.

### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

### Ethics statement

The studies involving human participants were reviewed and approved by the ethics committee of Islamic Azad University. The patients/participants provided their written informed consent to participate in this study.

### Author contributions

All authors contributed to the study conception and design, material preparation, data collection, and analysis. All authors contributed to the article and approved the submitted version.

### Funding

The authors did (not) receive support from any organization for the submitted work.

### Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## References

- Abbas, A., & Marhamah, M. (2020). Strengthening Character Education In Vocational High School. *JournalNX*, 6(10), 397-402.
- Abdollahi, B., & Azizi Shamami, M. (2012). Study of the belief system of individuals responsible for the role of educational supervision and guidance in elementary schools in Tehran. *Quarterly Journal of Educational Leadership and Management*, 6(4), 101-116.
- Arthur, L., Marland, H., Pill, A., & Rea, T. (2006). Postgraduate professional development for teachers: motivational and inhibiting factors affecting the completion of awards. *Journal of in-service education*, 32(2), 201-219.
- Baker, M. J. (2015). Collaboration in collaborative learning. *Interaction studies*, 16(3), 451-473.
- Díaz-Maggioli, G. (2004). Professional development. *Virginia: Association for Supervision and Curriculum Development (ASCD)*.
- Eddy, P. L. (2010). *Partnerships and collaboration in higher education: AEHE*. John Wiley & Sons.
- Guskey, T. (2000). *Evaluating professional development*. Corwin Press.

- He, S., Shi, X., Choi, T.-H., & Zhai, J. (2023). How do students' roles in collaborative learning affect collaborative problem-solving competency? A systematic review of research. *Thinking Skills and Creativity*, 101423.
- Jerez, O., Orsini, C., Ortiz, C., & Hasbun, B. (2021). Which conditions facilitate the effectiveness of large-group learning activities? A systematic review of research in higher education. *Learning: Research and Practice*, 7(2), 147-164.
- Laal, M., & Laal, M. (2012). Collaborative learning: what is it? *Procedia-Social and Behavioral Sciences*, 31, 491-495.
- Laschinger, H. K. S., Finegan, J., & Shamian, J. (2001). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. *Health care management review*, 26(3), 7-23.
- Liao, Y.-W., Huang, Y.-M., Chen, H.-C., & Huang, S.-H. (2015). Exploring the antecedents of collaborative learning performance over social networking sites in a ubiquitous learning context. *Computers in Human Behavior*, 43, 313-323.
- Nokes-Malach, T. J., Richey, J. E., & Gadgil, S. (2015). When is it better to learn together? Insights from research on collaborative learning. *Educational Psychology Review*, 27, 645-656.
- Palloff, R. M., & Pratt, K. (2010). *Collaborating online: Learning together in community* (Vol. 32). John Wiley & Sons.
- Rafiei Taba Zavareh, S. E., Bagheri, N., & Sabet, M. (2022). Effectiveness of cooperative learning on math anxiety, academic motivation and academic buoyancy in high school students. *Iranian Evolutionary Educational Psychology Journal*, 4(3), 410-421.
- 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, J. A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School effectiveness and school improvement*, 17(2), 179-199.
- Safari, A., Bdollahi, B., Nnaveebrahim, A., & Zeinabadi, H. (2018). Review and explain the antecedents of professional development collaborative educational organizations. *Journal of*

*New Approaches in Educational Administration*, 9(35), 269-290.

[https://jedu.marvdasht.iau.ir/article\\_3336\\_3dc9ac440c55aebc544533c729f8fcda.pdf](https://jedu.marvdasht.iau.ir/article_3336_3dc9ac440c55aebc544533c729f8fcda.pdf)

Shirzadegan, M. (2013). *Investigating the role of the school principal in creating professional development groups based on collaboration among elementary teachers* [Kharazmi University]. Tehran.

Torabi Nia, E., Jamali, F., & Nateqi, N. (2023). Comparing the effectiveness of collaborative teaching method with brain-based teaching method on students' social competence [Original]. *Iranian Journal of Educational Research*, 2(2), 27-40. <https://doi.org/10.22034/2.2.27>

Wallace Jr, R. C. (1996). *From vision to practice: The art of educational leadership*. ERIC.

Yazdanpanah, Y., Mohamadinaeni, M., Mahnegar, F., & Hoseini, M. (2023). The Role of Educational Groups in the Professional Promotion of Primary School Teachers. *Journal of research in instructional methods*, 1(1), 65-78. <https://doi.org/10.22091/jrim.2023.9125.1018>