

PROFESSIONAL DEVELOPMENT AND PERFORMANCE ASSESSMENT SYSTEM FOCUSED ON STRENGTHENING TEACHERS' COLLABORATION: THE CASE OF GEORGIA

Marika Kirvalidze, Sofiko Lobzhanidze

Ilia State University, Georgia

E-mail: marika.kirvalidze.1@iliauni.edu.ge, sopiko_lobjanidze@iliauni.edu.ge

Abstract

Studies confirm that professional development at the school base through the teachers' collaboration is the most result-oriented outcome among the alternative ways of teachers' professional development. One of the declared goals of the centralized system of teachers' professional development and performance assessment operating in Georgia is to facilitate teachers' collaboration. However, the contribution of the mentioned system in strengthening the teachers' collaboration has not been studied so far. The purpose of the present research was to study the impact of the centralized system of teachers' professional development and performance assessment on teachers' collaboration at general educational institutions. The issue was studied using the qualitative methods - focus group, interview, and content analysis of documents. Eight schools were selected for the study. Two focus groups were conducted with teachers and one interview was recorded with a school leader at each school. Furthermore, interviews with ten experts in the field were recorded. It was demonstrated that the centralized system of professional development and assessment focused on developmental assessment helps to strengthen the teachers' professional relations. Activities closely related to the teacher's work, the correct attitude of the school leaders, teachers' involvement in making decisions, the existence of preset goals, working schedule and space are important for collaborative relations. Existence of unified mechanisms for professional development, mistrust among colleagues, changes being constantly introduced to the education system, shortage of time were revealed as hindering factors for teacher collaboration.

Keywords: *qualitative research, school-based teachers' professional development, teachers' assessment, teachers' collaboration*

Introduction

Significance and Theoretical Foundations of the Research

Professional development of a teacher is a set of activities aimed at developing the subject or methodical knowledge, skills, experience or other professional characteristics of the teacher. Professional development of a teacher involves a continuous process of reflection, learning and action to improve one's own knowledge and skills. This strengthens the teaching practice and has a positive impact on students' results (Angus-Cole, 2022, p.1). Education specialists recognize and researchers confirm (Alkhalid, 2018, Kazemi et al., 2021, Porter et al., 2021) that the school-based professional development of teachers is the most practical and result-oriented among the alternative ways of professional development of teachers. This kind of professional development, on the one hand, is more adapted to the specific needs of

the teacher, and, on the other hand, it corresponds to the learning goals and objectives of the students. Using this model of professional development, unlike traditional forms of professional development involving unified activities offered from outside, the teacher grows professionally and learns through observation of their own practice, analysis, reflection, peer feedback, testing new approaches in the local context and, in general, professional collaboration with colleagues¹(Goddard et al., 2007). The results of the research of the school-based teacher professional development program conducted in Norway in 2016 confirm that the more closely the professional development activities are related to the direct practice of the teacher, the more effective it is. The activities of the mentioned program were based on teachers' reflection on their own practice and continuous sharing of experience with their colleagues. According to the teachers participating in the program, school-based professional development activities are so closely connected to practice that teachers can immediately apply the newly acquired experience in a classroom. Expectation of continuous support from colleagues enhances their confidence in this process (Svendsen, 2016). Coordination with colleagues, mutual sharing of resources and professional communication in the learning process are important components of school-based teacher professional development models. In such an environment, colleagues have the opportunity to jointly discuss the successful aspects of the practice, their determining factors, challenges related to the practice and with mutual help to solve the issues that concern them. Consequently, a collaborative environment helps the teacher to develop objective self-esteem as well, which, in turn, increases their openness to evaluating their own activity. A safe, collaborative environment in which teacher performance assessment is transparent and based on mutual trust, teachers have the opportunity to create professional communities and learn from each other is an important prerequisite for the implementation of an effective, development-oriented evaluation system (TALIS, 2018). The system of professional support and assessment of teachers should be focused on the continuous professional development of each teacher with regular study of the learning process, analysis of the results of interim assessment and development-oriented feedback (Stronge & Tonneson, 2015). The existence of such a system, in turn, is an indispensable factor for ensuring a high quality of teaching and learning. Centralized systems of professional support and assessment of teachers, also called formalized assessment, impose certain, unified requirements on teachers at the state level in the direction of professional development. It suggests professional support mechanisms for their implementation. In countries with a centralized educational policy, the goals of teacher performance assessment are mostly deterministic, while in countries with decentralized and semi-decentralized educational policies they are more development-oriented. There are several approaches to a development- and support-oriented assessment system. One of the most effective approaches used to evaluate the teacher's activity provides for determining the teacher's professional need by the so-called 360-degree or circular assessment system which enables a professional to assess their own performance not by one but multiple complementary mechanisms - self-assessment, documentation analysis, feedback from students and parents, results of students, feedback from school leaders and colleagues, results of professional dialogue – feedback from colleagues, including academic department/departments and quality development-oriented groups (Baroda et al., 2012). The mentioned mechanism comprehensively studies the professional needs of the teacher, enables them to be reflective and purposefully plan their professional development. It is important to understand reflective practice for implementing a teacher's objective assessment system, within the scope of which they critically assess their own work, triggering them to fully engage in the lifelong learning process (Schon, 1983). A reflective teacher not only asks

¹ Professional collaboration - involves constant observation and feedback between colleagues, where a culture of professional sharing, dialogue, experiments and criticism is commonplace. Collaboration can involve a range of activities, from informal, unplanned collaborative work done by teachers to implementing more formal collaborative approaches (Report of the Review to Achieve Educational Excellence in Australian Schools, 2018).

questions rationally and carefully, but they use the answers to those questions as a guide to change the practice for the better. Considering the research issue, the theoretical framework of the research is the social constructivism theory and the Gibbs reflection model. According to the social constructivism theory, knowledge is obtained through the sharing of opinions and ideas. Individuals gain experience by interacting with each other and the environment they live in (Amineh & Asl, 2015). Gibbs' model of reflection (Gibbs, 1988) clearly shows the importance of reflection and feedback in the process of assessing an individual's professional development and performance. According to this model, any professional should go through several stages of reflective practice: 1. Description of existing reality without conclusions and evaluative attitudes - what happened, when, where, by whom; 2. Expression of feelings - what you felt directly during the process and what your current attitude is towards what happened; 3. Evaluation - value assessment of what happened, classification of positive and negative aspects; 4. Analyzing what happened - drawing a conclusion from the situation based on a comparative analysis of one's own and others' experiences; 5. Generalization/making conclusions - thinking about the particular situation one more time, analyzing, based on the experience gained how you will behave in a similar situation another time 6. Drawing up a personal action plan based on the analysis of the current situation - what competencies you need to develop and how you should work in order to better deal with a similar situation in the future. Thus, the theoretical foundation of the research is, on the one hand, a reflective model that prompts the teacher to constantly review and critically assess the practice, and, on the other hand, the social constructivism theory, according to which the process of continuous development depends on social interaction (Akpan et al., 2020).

Current Situation and Challenges in Georgia

In 2015, implementation of significant changes at the national level in the system of professional development and performance assessment of teachers in general education schools of Georgia commenced. Until this period, activities focused on professional development and/or assessment of teachers were conducted in a pilot regime, in a certain part of schools, and, therefore, had a local character. In particular, in 2004-2007, the educational system transformation and strengthening project called "Ilia Chavchavadze" was implemented in a small part of general education public schools, which aimed to support teachers to create an effective learning and teaching environment, develop their assessment and classroom management capabilities (Shapiro et al., 2007), which would ultimately improve the quality of the learning process. The teachers involved in the project provided assistance to other teachers in the practical application of the studied methodology by observing model lessons and sharing resources. The feedback provided within the scope of the project had a developmental function for teachers. As was revealed during the evaluation of the project, active collaboration between schools and teachers turned out to be the most important aspect of implementing a successful teaching and learning practice (Shapiro et al., 2007). Despite the relevance of the project and the positive response, its implementation was terminated, the decision not being based on objective pieces of evidence obtained as a result of research. In 2013-2015, the project "Professional development of teachers at the school base" was implemented in a pilot regime in 10% of the public schools of Georgia, the main goal of which was to establish a collaborative school culture and increase the effectiveness of the quality of teachers' performance through mutual teaching. Within the framework of the project, professional development groups staffed by teachers were created at school which were trusted by the colleagues themselves. The project consultant,

who was a representative of the National Center for Teachers' Professional Development,² a subordinate agency of the Ministry of Education and Science, periodically visited the groups created at school. The feedback provided by the consultant and other representatives of the project during the visit had the function of a developmental assessment.

Despite the positive feedback from the teachers and the significant improvement of the culture of collaboration and co-teaching at the beneficiary schools (Inasaridze et al., 2015), the mentioned project also ceased to function, which strengthened the sense of instability and nihilism caused by frequent, unsubstantiated changes in the community of teachers.

Currently the Teacher's Professional Development and Career Advancement Scheme constitute the centralized system of assessing the teacher's professional development and performance, the requirements of which are mandatory for all state general educational institutions. The existing centralized mechanism for teacher's professional development and performance assessment was developed by the National Center for Teachers' Professional Development in 2015. Its main purpose is to increase the quality of teaching and learning in general educational institutions in order to improve the students' results through the systemic professional development of a teacher. The existing centralized mechanism for teacher's professional development and performance assessment regulates the issues related to the teacher's professional development, determines the types of the teacher's status, the rules for granting, confirming, suspending/restoring the relevant status. The scheme defines three types of status of a teacher - head, leader, and mentor. The teacher assigned to the status of head in the scheme meets the requirements prescribed by the legislation of Georgia and their subject and methodical competencies are approved. Additional requirements are set for leading and mentoring teachers. In particular, the leading teacher takes care of the professional development of colleagues, investigates, implements in practice and shares innovations in the field of education with colleagues, conducts research on school needs, etc. Taking into account the professional needs of colleagues, the mentor teacher plans a unified strategy for the professional development of school teachers, develops recommendations regarding current processes in the field of general education at the national level, establishes contacts with international educational institutions (Professional Standard for Teachers, 2020). It is worth noting that it is the duty of teachers of all statuses to cooperate with their colleagues for the purpose of self-development and mutual development in order to improve the results of students (Professional Standard for Teachers, 2020). The centralized mechanism defines mandatory activities for teachers to change status, and these activities are evaluated using standardized assessment tools.

Until 2020, within the framework of the centralized mechanism for teacher's professional development and performance assessment, the school had a teacher-supporting "evaluation group" which evaluated the teacher's performance with both developmental and deterministic evaluation. The deterministic assessment of the teacher's performance was the basis for raising their status and, accordingly, increasing their salary. The existing centralized mechanism for teacher's professional development and performance assessment has undergone significant changes several times. Among them, one of the innovations is the transition from the deterministic evaluation of the teachers' performance at the school base to the fully developmental evaluation and the implementation of the independent system of teacher assessment and quality development at the school base. This change aims to provide schools with more autonomy and strengthen the culture of collaboration and mutual learning among teachers.

As the authors of the centralized system of teachers' professional development and performance assessment note, changes in the scheme were introduced because the deterministic

² The National Center for Professional Development of Teachers is a Legal Entity of Public Law of the Ministry of Education and Science, the purpose of which is to promote the improvement of the quality of learning and teaching at school by establishing a high standard of professional knowledge and performance of a teacher (<http://tpdc.ge/geo/page-1/100>)

evaluation of teachers at schools negatively affected positive relations between colleagues, while the declared goal of the centralized system of teachers' professional development and performance assessment, as mentioned above, is promoting a collaboration-based school culture. Considering the above, while in the original version of the scheme the school assessed the teacher's performance and based on its decision the teacher would upgrade their status, currently the recommendations issued by the support group have only a developmental function for the teacher, and the deterministic assessment necessary for progress is made by the agencies subordinate to the Ministry of Education and Science. Taking into account the results of Georgia in international studies, it can be said that there are positive changes in terms of teachers' collaboration. For example, the results of the Teaching and Learning International Study (TALIS) confirm that a large number of teachers in Georgia are involved in collaborative activities. With this indicator, Georgia is significantly advanced compared to other countries participating in the study (TALIS, 2018). Despite the positive changes in terms of collaboration observed in international studies, the role of the centralized system of teacher's professional development and performance assessment in the strengthening of teacher collaboration in general educational institutions has not been studied in Georgia so far. It is important from a practical point of view to conduct a scientific discussion, draw conclusions and develop recommendations regarding the research issue. The research issue is made more relevant by the 2022-2030 National Strategy of Education and Science of Georgia - "During the mentioned period, a system of teachers' continuous professional development will be established at the school base, within the scope of which teachers will be involved in the process of continuous professional development based on their needs, will receive intensive, constructive feedback and they will share responsibility for learning outcomes with other members of the school community. (United National Strategy of Education and Science of Georgia - 2022-2030).

This research tries to help decision-makers reach a research-based decision and give practical benefits to teachers of general education schools and school leaders in the sense of establishing an effective mechanism for teachers' professional development at the level of individual schools.

Research Aim and Research Questions

The purpose of the present research was to study the impact of the centralized system of teacher's professional development and performance assessment in Georgia on the teachers' collaboration in a general educational institution.

According to the purpose of the research the following research questions were formulated:

- What kind of approach to teacher's professional development and performance assessment is effective for teachers' collaboration?
- What factors affect the collaboration of teachers within the scope of the professional development and performance assessment system of teachers?
- What forms of teachers' collaboration were affected by the professional development and performance assessment system of teachers?

Research Methodology

General Background

Based on the purpose of the research, on the one hand, the research questions were related to the study of the impact of the centralized system of teachers' professional development and assessment on teachers' collaboration, and, on the other hand, the research questions studied

the factors determining the effectiveness of the centralized system of teachers' professional development and assessment in the collaboration component.

Since the main focus of the research was the study of the essence, nature of the issue, the qualitative methodology was considered as an appropriate type of research. Phenomenology was used as the research approach. According to this approach, the conclusions drawn are based on the experience, beliefs and vision of individuals (Guest et. al., 2013). The research is carried out in December, 2019- June, 2022.

Sample Selection

In order to achieve the aim of the research and answer the research questions, the following target groups were selected:

- a) General education school teachers, leaders (director, deputy);
- b) Experts in the field'
- c) Decision-makers in education.

198 respondents participated in the research: 8 school principals/deputy principals, 4 employees of National Center for Teacher Professional Development (Decision-makers in education), 6 other experts in the field and 180 teachers.

Table 1
The Main Characteristics of the Participants

Characteristics	Participants			
	General education school teachers	Leaders (director, deputy)	Experts in the field	Decision-makers in education
Age	From 25 to 65 years	From 31 to 65 years	From 45 to 60 years	From 45 to 60 years
Gender	The majority are female	The majority are female	Half of them are male, half are female	Half of them are male, half are female
Level of Education	Bachelor's degree, Master's degree	Bachelor's degree, Master's degree	Master's degree, Doctoral degree	Master's degree, Doctoral degree
Residence	A local resident of the same town/village in which the school is located	A local resident of the same town/village in which the school is located	Residents of the capital	Residents of the capital

Purposive non-probability selection was used to select the population of the target schools. The selection criterion was the size of the school and involvement in projects focused on strengthening school-based collaboration. The following were selected for the study:

1. Large contingent schools,³ in which various projects aimed at improving the teachers' collaboration worked intensively;
2. Large contingent schools, at which projects aimed at improving the teachers' collaboration did not work;

³ Large contingent school - 1000 or more students (when determining large contingent schools, we relied on the order of the Minister of Education and Science of Georgia, according to which the number of students in small and large contingent schools is determined).

3. Small contingent schools⁴ at which projects aimed at improving the teachers' collaboration worked intensively;
4. Small contingent schools at which projects aimed at improving the teachers' collaboration did not work.

Such purposive selection of target schools was caused by the following circumstances:

1. During the selection, the size of the school became the point of interest within the present research, since some studies conducted abroad (Bevan & Flores, 2021) confirm that small contingent school teachers cooperate more intensively and effectively. Also, according to some studies, small contingent school teachers see more need for collaboration. For example, based on the results of the research conducted in England, it can be said that small contingent school teachers cooperate more, understanding that they can better cope with the shortage of educational resources with joint efforts, achieve educational results more effectively, etc. (Muijs, 2008).
2. The selection of schools involved in projects aimed at strengthening collaboration was due to the fact that the interest of the research was to find out how such projects influence the teachers' collaboration at school and how it further helps them to cooperate within the scope of the centralized system of teacher's professional development and performance assessment as well.
3. Schools with no projects focused on improving teachers' collaboration, were selected for the research in order to study the direct impact of the teacher's professional development and performance assessment system on teachers' collaboration.

Typical cases were selected for the study - two schools from each population list. The specific schools, in which the research was conducted, have been selected randomly, from the purposively selected population (selection frame), because, considering the purpose of the research, it was not necessary to narrow down the selection frame determined at the purposive selection stage or to take into account any other criteria. Since it is important to determine any factor affecting the collaboration of colleagues within the framework of the teachers' professional development and performance assessment mechanism in order to develop further recommendations, analyzing the opinions, experience, recommendations and vision of all parties was valuable within the scope of the research. Accordingly, the opinions of teachers, school leaders, decision-makers and other experts in the field were studied.

Purposive non-probability selection was used to choose decision-makers and other experts in the field. In particular, their status and role in determining the education policy in Georgia were taken into account during the selection. Furthermore, their publicly expressed positions regarding the teacher's professional development and performance assessment system -to draw objective conclusions, within the scope of the research, experts' opinions having different views on the research issues were studied. The analysis of the different positions related to the topic helps us to make an in-depth description of and analyze the issue to be studied by comparing the positions of the interested parties in drawing reasoned, valid conclusions. This, in turn, enables the reader to decide by themselves whether the results can be generalized.

Instrument and Procedures

For data collection the following methods were used:

1. An in-depth semi-structured interview, using which it was studied
 - a) Opinions of decision-makers (who were involved in the process of developing

⁴ Small contingent school - from 170 to 205 students included (when defining small contingent schools, we relied on the order of the Minister of Education and Science of Georgia, according to which the number of students in small and large contingent schools is determined).

and implementing various models of the centralized system of teacher's professional development and performance assessment):

- Regarding the effectiveness of the centralized system of teacher's professional development and performance assessment in the component of strengthening the teachers' collaboration;
- About the facilitating and hindering factors related to effective functioning of the collaboration component of the centralized system of teacher's professional development and performance assessment at school;
- About the goals of various models of the centralized system of teacher's professional development and performance assessment and the reasons for the main changes introduced to them in terms of teachers' collaboration.

The interview was recorded with four employees of the National Center for Teachers' Professional Development.

- a) Opinions of experts in the field at various positions regarding the teacher's professional development and performance assessment system:
 - Regarding the effectiveness of the centralized system of the teacher's professional development and performance assessment in the component of strengthening the teachers' collaboration;
 - About the facilitating and hindering factors related to effective functioning of the collaboration component of the centralized system of teacher's professional development and performance assessment at school;
 - About the goals of various models of the centralized system of teacher's professional development and performance assessment and effectiveness of the main changes introduced to them in terms of teachers' collaboration.

The interview was recorded with six experts in the field.

Each interview lasted between 45 and 60 minutes.

- b) Opinions of school leaders:
 - Regarding the impact of the functioning of the centralized system of teacher's professional development and performance assessment on the establishment of a collaborative culture at school/strengthening of teachers' collaboration;
 - Regarding the role of school leaders in the effective implementation of the centralized system of professional development promoting teachers' collaboration.

The interview was recorded with the leaders of all schools involved in the study - principals or vice-principals – 8 participants.

The interviews were face-to-face. Each interview lasted between 45 and 60 minutes.

2. Using a focus group, the opinions of support groups and other teachers working at schools within the framework of the centralized system of teacher's professional development and performance assessment were analyzed:
 - On how the activities provided within the framework of the centralized system of teacher's professional development and performance assessment contribute to the establishment/improvement of a collaborative culture at school;
 - About the factors existing in the school environment, which determine the effectiveness/lack of effectiveness of the centralized system of teacher's professional development and performance assessment in terms of collaboration.

The focus groups were conducted at all schools selected for the research. One focus group with support group members and one focus group with other teachers were conducted at each school. 16 focus groups were set up. 10-12 teachers participated in each focus group. The focus groups were face-to-face. Each focus group lasted between 100 and 120 minutes.

3. The content analysis method was used to review the local experience - the content analyzes of the legal framework, policy documents and reports related to the research issue. In particular: a. teacher's professional standard; b. Teacher's professional development and career advancement scheme and changes introduced to it at different times. c. Reports of various projects focused on collaboration. These documents were processed within the research in order to analyze the declared goals and the existing reality. Within the scope of the content analysis of the documents the directions that constituted the focus of the research were identified, the objectives set at the policy level to promote teachers' collaboration were analyzed and the main activities to complete these objectives were prescribed.

In order to draw valid conclusions within the scope of the research, the analysis of the documents was compared with the narratives of the research respondents within the conducted focus groups and interviews. Using the principles of methodological triangulation adds more credibility to the results of the research.

Data Analysis

After each interview was completed, notes were taken, and the interviews were carefully transcribed. Data were transcribed and analyzed by two researchers.

Thematic and structural content analysis was used to analyze the data obtained through focus groups and interviews. At the first stage of the research, thematic analysis was used as an analytic approach to analyze the data obtained during the focus group and interviews and at the second stage of the research - structural analysis was used, where special attention was paid to such an element of this type of analysis as evaluation - the narrator's comment or emotional reflection on their narration.

The analysis of the data was performed using Marshall and Rossman's (2016) content analysis steps: organize the data, generate categories or themes, code the data, test emergent understandings of the data, search for alternative explanations of the data, write-up the data analysis.

Taking into account the research aim and questions, the categories and sub-categories (Table 2) were created for analyzing the respondents' opinions of each group.

Table 2 (A)

Categories and Sub-categories for Analyzing the Decision-makers and Other Experts' Interviews

Categories	Sub-categories
Factors related to effective functioning of the collaboration component of the centralized system	Facilitating factors
	Hindering factors
the goals of various models of the centralized system	The reasons for the main changes
	The impact on teachers' collaboration of various models of the centralized system

Table 2 (B)
Categories and Sub-categories for Analyzing School Leaders' Interviews

Categories	Sub-categories
Factors related to effective functioning of the collaboration component of the centralized system	Facilitating factors
	Hindering factors
the role of school leaders in the effective implementation of the centralized system of professional development promoting teachers' collaboration	The role of leader' attitude A leader's personal involvement during the encouragement of teachers' collaboration

Table 2 (C)
Categories and Sub-categories for Analyzing Teachers' Focus-groups

Categories	Sub-categories
Factors that influence teachers' collaboration	Facilitating factors
	Hindering factors
Forms of teachers' collaboration improved by the centralized system of professional development promoting teachers' collaboration	

Validity, Reliability, and Ethics

To ensure the accuracy of respondents' responses, interviews and focus groups with participants were audio-recorded. Before the start of the interviews and focus groups, the participants gave their consent to participate in the interview and for it to be recorded. The participants were assured that they had the freedom to leave the study at any moment, and their names were kept private.

The focus group and interview protocols were developed by the research authors. These protocols included a list of subjects to be covered as well as several open-ended questions. The questions were designed after the relevant literature had been studied. The aim of the research, the research questions, the requirements of the teacher's professional standard and other regulatory documents regarding the collaboration of teachers were also taken into account while developing the research instruments.

The instruments were piloted in schools similar to the population selected for the study with teachers and principals/deputy principals, therefore, the questions were modified and adjusted based on this pilot results as needed. The improved instruments were sent to experts in the field to verify their validity.

Limitations

While the group of respondents within the research was broad - selected school teachers, school leaders, decision-makers, other experts in the field - representatives of state, non-governmental and academic structures, but the facts that the research issues were studied through

document analysis, in-depth interviews and focus groups and there were not the opportunity to directly observe the process can be considered as limitations of the research. Consequently, the results, findings and conclusions of the research are completely based on the opinions of the respondents, their perceptions and ideas, experience and self-evaluation regarding the research issue. Insincerity of the respondents can be considered as one of the limitations of the research, however, this problem was minimized by using moderation techniques between the interviewer and the respondent, including asking verifying questions in the course of the focus groups and interviews.

Research Results

As it was revealed during analyzing the focus group with teachers and in-depth interviews, at the first stage of the implementation of the centralized system of teacher's professional development and performance assessment, most of the teachers were less aware of the opportunities of professional development through the activities of the Scheme. At the first stage, they perceived the centralized system only as a means of career advancement. In the working process, however, the majority of the persons participating in the research realized that the activities within the centralized system - professional dialogue, attendance by support group members at colleagues' lessons and subsequent feedback, organization of working meetings and/or participation in them, contribute to professional development and career advancement on the one hand, while, on the other hand, it increases mutual trust and forms a collaborative culture. According to the teachers, the activities of the Scheme encouraged their "professional communication". Furthermore, according to them, before the implementation of the centralized system the conversation between colleagues was mostly not professional until now: "In our free time, we, colleagues used to talk about general, not school-related, everyday topics, while planning lessons or other activities together within the framework of the Scheme, and joint participation in working meetings triggered us to make the focus of our conversation more or less professional" - says one of the large contingent school teachers in the focus group.

It should be noted that within the framework of the research, a tendency was revealed that professional relations within the framework of the centralized system were more encouraged in large contingent schools.

It is also important to mention that the leaders of the schools that were not involved in projects focused on collaboration, noted in the interviews that the compulsory activities of the Scheme strengthened both individual and group responsibility and mutual trust among the teachers. "Since there were cases when several teachers planned the lesson together, in addition to the teacher conducting the lesson, colleagues also took responsibility for the process of the lesson and the results obtained," says one of the school leaders in the interview.

Furthermore, teachers of the same target group note that they have grasped the essence of collaboration within the framework of the Scheme: "I realized what activities I can actually do together with my colleague and what benefits it might entail both for me and my colleague" - says one of the teachers in the focus group.

The school leaders and teachers, who were involved in the projects focused on strengthening collaboration, parallel to the operation of the scheme or before its implementation, in the presented research emphasized the effectiveness of the experience gained within the scope of the projects: "in a centralized system I relied on the knowledge acquired through the collaboration with my colleagues at the school base within the framework of the teachers' professional development project". "Although it took a lot of time for us to carry out the project activities, I feel that I gained a lot of experience, which I still use when communicating with my colleagues" - said teachers from schools involved in various projects.

Opinions of experts in the field are less consistent with each other when they discuss the centralized system of teacher's professional development and performance assessment as a kind of a trigger to strengthen teachers' collaboration. According to one part of the experts, the aim of the Scheme to facilitate teachers' collaboration is too formal and "the only thing centralized systems like the Scheme can do is to provide knowledge about the forms of teachers' collaboration". Experts in the field with such an attitude think that a large number of teachers in the centralized system "consider collaboration as a goal to raise their status and not as a means to improve the results of students." According to the position of this part of the experts, it is necessary to initiate and implement collaboration forms corresponding to professional needs at the school base. According to one of them: "In this case, the necessity drives the teacher to collaboration, not the regulation prescribed in a document imposed on the teacher." Respondents also emphasize the fact that implementation of collaborative activities within the Scheme requires processing formal documentation, requiring additional time, which the teachers are already short of.

As regards the opinion of the second part of experts in the field, while teachers' collaboration still remains a challenge, this issue regulated within the framework of the centralized system is conducive to the process: "When a teacher knows what activities focused on the development of collaboration they should carry out within the scope of the centralized system and that their activity is recognized in this direction, they are more motivated". According to their position, in this case, teachers are united by a common purpose and bear a common responsibility for achieving specific results.

The analysis of respondents' opinions revealed several factors that promote and prevent teachers' collaboration (Table 3).

Table 3
Promoting and Hindering Factors for Teachers' Collaboration

Factors that promote collaboration	Factors that prevent collaboration
Perceiving collaborative processes as an integrated part of the teacher's performance	Existence of unified mechanisms for professional development
The existence of predetermined goals and working schedule	Mistrust among colleagues
Development-oriented assessment	Changes being constantly introduced to the education system
The correct attitude of school leaders	
Teachers' involvement in decision-making processes	Shortage of time
Space for cooperation	

As a result of analyzing the opinions of the respondents, it was revealed that at schools where teachers saw the need to use each other as human resources for daily activities - refining their own practice and improving student results, collaborative processes turned out to be more successful. Accordingly, in the opinion of the respondents, within the scope of teacher's professional development and performance assessment systems it is important for the teacher to cooperate with their colleagues on issues that are an integral part of their working process, for example, creating lesson plans and assignments for students, planning and implementing educational and social projects, analyzing the students' academic results, overcoming difficulties

present at classrooms, sharing the achieved success, etc. In such a case, collaboration will encourage teachers' professional relationships more, which, as mentioned above, have been positively influenced by the teacher's professional development and assessment system.

In this case, the teacher realizes that mutual learning, mutual attendance, joint lesson planning and other collaborative activities constitute their response to everyday challenges. As one of the school leaders points out in the interview: "In such an environment, the teachers' collaboration is considered as a sustainable process and not an eclectic mix of activities designed for a short-term effect."

It is important to note that the presence of such an environment was more focused on by the representatives of the schools which were involved in the projects aimed at collaboration. This was also the case for schools where the positive influence of school leaders in encouraging and supporting teachers' collaboration was observed (the role of school leaders in managing collaborative processes is discussed in more detail below).

The analysis of the research results revealed that collaborative activities are more effectively implemented at schools where shared leadership constitutes the school's daily routine, school leaders support teachers in implementing collaborative activities and recognize their achievements. And in those schools where the school leaders themselves do not properly understand the benefits of collaboration, the teachers are also less likely to apply the practice of mutual learning. There is a similar situation at schools where projects focused on strengthening of collaboration were implemented.

Teachers and experts in the field note that it is important for school leaders to: a. be a model of collaboration themselves – they should be providing an example of allocating roles and responsibilities; b. set clear goals for teachers; c. encourage them to carry out joint activities; in order to plan and conduct collaborative activities, it is inevitable to provide the school with the necessary educational resources. d. recognize and encourage the teacher's efforts while engaging in collaborative activities. For example, this can be done by organizing an exhibition of resources created through collaboration at school, competitions of collaborative learning projects, giving various awards, etc.

Within the scope of the present research, there were also teachers who in the focus groups pointed out the role of teachers' personal attitude in carrying out collaborative activities. According to them, the attitude of the school leaders towards the issue and other factors related to school influence the formation of the teacher's personal attitude.

In the opinion of the majority of the target group respondents, at least at the initial stage, while collaboration is not yet perceived by the teacher as an important component of the activity, it would be good for teachers to have time allocated for the implementation of collaborative activities at schools, with an appropriate schedule - "They should know that just like they conduct a lesson during a specific period of time, they also have a schedule for drafting a curriculum, creating resources, discussing the success and challenges of the common classes, etc. together with a colleague." - says one of the school leaders. According to school leaders and teachers, their collaboration is much more effective when they meet for a specific purpose. The progress of the process is facilitated by the fact that at this time teachers are exempt from the obligation to conduct lessons. In the respondents' opinion, it is important for the teacher to have the obligation at the state level to dedicate certain contact hours to teachers' collaborative activities at the school base. In order to decentralize the process and conduct it in a purposive manner, it is important that the teacher and the school decide which activities the teacher will be involved in. "If they need support in the form of trainings or seminars for professional development in this direction, the appropriate services should be provided both by the state and private organizations, from which the teacher themselves will decide which one to use," - notes in the interview one of the experts in the field.

It was revealed that the formation of a culture of mutual learning is positively influenced by an environment in which teachers have the opportunity to be involved in solving issues important for the school, there should be opportunities for both horizontal and vertical collaboration at school. The respondents explain the connection between collaboration and involvement in decision-making as follows: "When the recommendations made as a result of joint research become real activities at the school and are implemented, the teacher sees their own value as a resource and realizes that, together with a colleague, they can significantly influence the processes, which increases their self-efficacy and this encourages towards even more collaborative activities" (notes one of the small contingent school teachers).

Hereby it is important to note that the importance and benefits of involvement in the decision-making process were mostly realized at the schools where the project/projects aimed at strengthening the teachers' collaboration functioned or is/are still functioning.

It should be noted that the respondents who expressed a neutral or negative attitude towards the benefits of collaborative activities within the framework of the Scheme have a negative experience with participation in decision-making. One of the teachers in the focus group says: "With the instructions of the deputy director, we met several times to solve the problem in a particular class. Despite the successful steps and obvious progress that was observed in the class, school leaders made the decision to disband the class." According to the teacher, in this case, joint meetings of colleagues to discuss a specific issue do not make sense anymore.

Within the framework of the present research, it was revealed that collaboration at small contingent schools is strengthened by the teacher's sense of self-efficacy - the more the teacher sees their importance as a professional, the more motivated they are to carry out cooperative activities. A similar trend was not observed in the answers of respondents from large contingent schools.

The physical environment in which teachers conduct a professional relationship was identified as an important factor promoting collaboration. According to the respondents, it contributes to being motivated for collaboration when teachers have a dedicated space for meetings and discussions. Respondents note that it is necessary to provide teachers with access to diverse means of communication; it is important to have both synchronized and asynchronized mechanisms of collaboration - face-to-face and remote meetings, closed groups and chats on social networks, e-mail, etc. The need in this regard can be observed especially in the answers of large contingent school teachers. As they note, "If there is more than one shift at school, sometimes it is practically impossible, even if there is a workspace, to get together." On the one hand, this is due to large number of students at this type of schools and, on the other hand, the distribution of teachers' workload in different shifts, which, in turn, does not even provide the opportunity of conducting online synchronized meetings.

One of the most important factors hindering the implementation of a cooperative culture at school is the so-called star culture and mistrust among teachers - "Who might teach me? this guy? Seriously?". However, according to respondents, this threat can be easily overcome if teachers see the benefits of collaborating with a colleague in their daily practice. For example, "they will share an interesting idea from mutual attendance, save time and effort while creating resources together, etc." (notes a teacher from a small contingent school). It should be noted that the representatives of large contingent schools especially emphasized the need to solve the problem of mistrust among colleagues.

This research confirms that unified activities prove to be an obstacle for teachers' collaboration. In such conditions, they choose to save their already scarce time and work individually on the issues at hand.

As the results of the research clarify, for the majority of schools that were involved in projects aimed at strengthening the teachers' collaboration before the implementation of or in

parallel with the Scheme, the activities of the support group provided for in the framework of the scheme turned out to be "a repetition of what they had done before without any innovation", and for the other part of the schools that had previously no experience of professional collaboration - "a heavy burden" (a quote from a focus group of teachers and an interview with school leaders). The respondents of the target group emphasize that the conditions at all schools are different, and teachers have diverse experience. In order to encourage collaborative processes, it is important to consider individualism. No difference was observed between the results of large and small contingent schools. Teachers and school leaders involved in various collaborative projects particularly emphasized the above-mentioned hindering factor within the centralized system because, according to their experience, the activities within the various projects were more fitted to the needs of their schools and teachers and, therefore, were more effective.

The presented research has also demonstrated that teachers are more motivated to engage in the activities that are fitted with school. Furthermore, it is also clear from the findings of the present research that even in the centralized system it is possible to take into account the context of the school, if the activities within the scope of the system are based on a preliminary study of the needs of the schools.

According to the respondents, they have a "sense of instability and nihilism related to constant changes". This is mainly due to the fact that the changes implemented within the scope of the centralized system and in other projects are less related to real needs and the problem of ensuring the sustainability of the results. As the respondents say and the content analysis of the reports of various projects aimed at collaboration confirms, there is practically no institutional memory in the system. Specific projects are completed but schools do not have a system for maintaining and developing the already achieved results. And the beginning of another project is not logically related to the already achieved results and existing challenges.

The majority of the respondents regard the shortage of time as a factor hindering the teachers' collaboration within the scheme. Based on the results of the analysis of their responses it can be concluded that the irrational use of the available time has a negative effect on collaboration, while it is not true that teachers do not have time. For example, teachers' meetings without structuring were identified as a factor hindering the collaboration. These meetings do not have a specific purpose, the necessary resources are not provided in advance, the functions and duration of the meeting are not assigned. All this leads to a waste of time. Such cases make teachers have a nihilistic attitude towards working meetings and the benefits of professional dialogue with colleagues in general.

Discussion

The presented study proves that the collaborative activities of the centralized system have encouraged the cooperative relations of the teachers. It should be noted that within the framework of the research, a tendency was revealed that professional relations within the framework of the centralized system were more encouraged in large contingent schools. This trend can be explained by the fact that in small contingent schools, even without a similar system, teachers saw the need for each other as a resource and they more often addressed their colleagues for assistance in certain matters to overcome the challenges of the existing situation and in schools with large contingents, due to the shortage of time caused by the big hourly workload of teachers, they are less familiar with each other's professional capabilities.

It can be said that projects focused on collaboration at schools have left a long-term positive impact - the teachers of these schools are more aware of the importance of mutual learning to improve their own practice.

The result observed within the scope of the research can be explained by the following circumstances: since there is not much experience in carrying out collaborative activities with

colleagues at our schools, the benefits of this type of professional development were seen more and, accordingly, the activities aimed at strengthening collaboration were carried out more effectively by those teachers who were involved in projects focused on collaboration. And at schools that do not have the experience of participating in similar projects, collaborative activities within the scope of the centralized system of teacher's professional development and career advancement have a relatively formalized character.

Based on the results of the research, it can be said that the issue regulated by the centralized system, on the one hand, "triggers" the teacher to cooperate and, on the other hand, leads to the threat of giving the process a formal character, having less impact on the actual result.

It is hereby worth noting the issue confirmed by studies - when a teacher understands the benefits of collaboration both for their own professional development and improving the results of students, they themselves try to overcome the hindering factors and engage in joint activities with their colleague (Jao & McDougall, 2016).

Consequently, it is important for the teacher to understand their primary goal while carrying out collaborative activities - to improve their own practice.

Based on the narratives of experts having different opinions and teachers and school leaders with different experiences, it can be concluded that the Teacher's Professional Development and Career Advancement Scheme has provided teachers with knowledge regarding the essence of collaborative activities and their advantages, however, among colleagues it mainly encouraged only such joint activities as presentation-type working meetings, joint discussion of common goals, etc. Although such activities imply the teachers' collaboration, including communication and coordination, the impact of the centralized system is less visible in the implementation of forms of collaboration in schools, which involve deeper professional relationships, for example, reflective working meetings, joint lesson planning, mutual observation, peer coaching, etc. This can be explained by the fact that the teacher's professional activity was perceived as individualistic for years (Hindin et al., 2007). Accordingly, the strengthening of collaborative relations is connected with changing the teachers' values and attitudes. The process is complex and requires a lot of time and effort. Within the scope of the centralized system operating in Georgia, on the one hand, activities aimed at teachers' deep collaboration were not considered much, and, on the other hand, not enough time has passed for teachers to understand collaboration as a value.

Considering the results of the presented research, it can be concluded that such a system, within the framework of which colleagues share specific, concrete feedback with each other at school base, facilitates strengthening collaboration between colleagues in the Georgian context, while a system focused on deterministic assessment hinders collaborative relations.

The research reveals that the assessment of colleagues' performance by points had a more negative response in small contingent schools, which can be explained with the following circumstances - small contingent schools are mainly found in rural communities, where the majority of the members of the school team are related to each other, or they are neighbors and their informal relationships outside the school are close. The results of the presented research can be well explained by the findings of one of the studies conducted in Georgia (Nizharadze, 2001), according to which the classic small-group collectivist culture is predominant in Georgia, where the main social unit is kinship, friendship, the circle of acquaintances, and daily life is determined by the norms existing in these groups. In a collectivist culture, the scope of an individual's responsibility is quite narrow and almost does not extend to a large social unit - the state or the nation, and even more so to such an abstract norm as the law. Accordingly, it can be assumed that the general education school teachers perceive each other, the school collective, as a narrow society and feel responsibility towards them. Members of a collectivist society follow and take into account the requirements, common interests and values of the "we" group when making decisions (Hofstede et al., 2010: 90-91). That is why, in some cases, they have

to ignore the requirements of the law, in this case, the teachers' professional development and performance assessment system, in order not to negatively decide the fate of their colleagues to whom they feel responsible.

The above-mentioned trend of the presented research echoes the studies conducted abroad at different times, the results of the majority of which demonstrate that teachers expect development-oriented feedback from the school community, being based on trust and mutual respect. For example, a 2017 research study conducted in Portland (USA) confirms that effective, specific feedback related to the teacher's performance assessment has a crucial role in the teacher's professional development (Geshel, 2017). However, studies conducted in some countries are noteworthy, the results of which confirm that peer evaluation by colleagues does not lead to deterioration of the working climate either. For example, in the framework of the research conducted in Singapore, both developmental and deterministic types of assessment at the school base were used within the teachers' professional development and assessment system. Despite this, no deterioration in the results in terms of peer collaboration was observed (Koh, 2011). This may be due to the individualistic culture of the population of this country, including teachers, within which people rely on the law, the rule, and not on the interests of the narrow society when making decisions.

Studies of both centralized and decentralized systems of teacher's professional development and performance assessment, similar to the results of the presented study, confirm that teachers' collaboration should be understood as part of the context in which it is implemented (Hargreaves, 1994; Kelchtermans, 2006; Spillane et al., 2012; Stoll et al., 2006). The importance of taking into account the school context when implementing centralized project activities has been highlighted in a number of research findings. For example, within the scope of a two-year project, involving a collaboration between a university and a school, conducted in Hong Kong in 2012, activities offered by researchers to teachers were developed by analyzing the school context and fitted to their willingness and needs. The research demonstrated that through professional dialogue, the participating teachers were introduced to the teaching based on the research and they successfully implemented it into practice (Cheng & So, 2012).

Based on such positive results, the authors point out that for school improvement and teachers' professional development, it is necessary to make differentiated decisions and not the ones that are designed for everybody. The authors believe that developers and providers of professional development programs should realize that teachers have a real opportunity for professional development when the activities offered take into account the context of teachers' learning and their schools. In such a case, the teacher is considered as a partner and not a passive receiver of experience (Hargreaves, 1999).

Thus, within the scope of the teacher's professional development and performance assessment system it is important to focus on activities oriented to the professional need where the individual teacher perceives the social resource of their colleagues as an opportunity, to make their own practice better, on the one hand, and to contribute to improving/refining processes at the school level, on the other hand.

The presented research proves that school leaders have a decisive role in promoting the cooperation of teachers. These results of the research are consistent with the studies conducted abroad on this issue at different times. For example, in 2021, within the scope of a study conducted in one of the US states (Tennessee), the factors affecting the implementation of a collaborative program known as the learning partnership initiative were researched at schools. The results demonstrate that the process of collaboration is effective, and the obtained results are sustainable at school where school leaders, on the one hand, encourage teachers to cooperate and, on the other hand, support the implementation of similar activities. According to the results of this research study, which was conducted in the USA, the implementation of teachers' collaborative activities is practically impossible without the role of the school, supportive leadership and the provision of appropriate resources, (Carroll et al., 2021).

It is confirmed by the presented study that decisions inside the school should be made based on the principles of mutual participation and shared responsibility.

Studies conducted abroad at different times and in different contexts confirm that the more the recognition of teachers' capabilities is facilitated at schools, the less the threat of mistrust among colleagues. For example, a research study conducted in Finland (Aspfors & Bondas, 2013) confirms that the relations between colleagues were positive and based on trust at schools where the leaders facilitated the teachers in different ways to demonstrate their capabilities both for helping colleagues and the organizational development of the school in general.

The mentioned issue is interesting in relation to the results of the presented study, since mistrust among colleagues, according to the results of the study, was named as one of the factors hindering cooperation.

Similar to the results of the presented study, the results of the study conducted in the Netherlands in 2014 demonstrate that teachers' collaboration is influenced both by the factors that are related to school, including leadership, and teachers' personal traits (Honinigh and Hooge, 2014, 76).

The results of the presented study confirm that it would be good for teachers to have time allocated for the implementation of collaborative activities at schools. In our opinion, the trend revealed in the presented research that allocating the particular amount of time for working meetings with colleagues and structuring the schedule facilitates teachers' collaboration is due to the fact that schools have experience within the framework of various projects aimed at strengthening collaboration when they dedicated the time allocated in advance to collaboration with each other, for example, discussing the classroom challenges, analyzing students' academic data, planning a joint lesson. In their view, these meetings had a positive impact on their practice and students' results. Without structuring the time, teachers find it difficult to meet each other, because they are mostly busy with other everyday activities and do not have relevant experience either.

Within the scope of the presented research study, a small difference was observed when analyzing the responses of small and large contingent school representatives. There is a greater need to allocate time for collaboration in advance at large contingent schools. This trend is explained by the fact that large contingent school teachers in Georgia generally work with big hourly workload. In some cases, they work at more than one school or in different shifts of the same school. Considering this circumstance, it is sometimes very difficult to find time for collaboration and plan this process with one's own initiative.

Regarding this issue some research findings suggest that pre-structured time may be both conducive to collaboration and a hindrance. In particular, structuring the time in advance enables the teacher to cooperate with a colleague within the working time and space assigned to them. In this case, they perceive the process as an integral and integrated part of their activity, which is one of the strong factors promoting collaboration, as is confirmed by present research. One of the studies conducted in the USA in 2012 aimed to explore the opportunities and constraints that exist in relation to allocating time for teachers to facilitate data-based decision-making. As the research demonstrated, allocating a specific time for collaboration in the working schedule of teachers had a positive effect on collaboration, the attitude of teachers can be clearly seen in their phrases: "We cannot do it alone"; "We do it together"; "I love our collaboration time." They noted that "when they had enough time for collaboration, they always found someone with whom they could find a way to solve the problem at hand" (Datnow et al., 2012).

The study conducted by Zembylas and Barker's (2007), in which the teachers supporting the reform as well as the ones opposing it were involved, confirmed that the prescheduling of time positively influenced on the teachers' collaboration. Studies that point to the potential threats of pre-structuring the time and appropriate work schedules for collaboration, highlight that such meetings can make the process too formal. For example, artificial collaboration may be encouraged if the process is perceived as a control by the administration (Hargreaves, 1994).

It is interesting to note some research findings, demonstrating that along with structured time teachers should also have free time within which they will plan to collaborate with each other (Goddard et al., 2007; Strahan, 2003). The results of the presented study show that such an organizational issue as the existence of free space is also a very important factor promoting collaboration. According to studies, all the details in this matter are important for the effectiveness of the process, for example, in one of the studies it is emphasized that the free space designated for collaboration must be close to the teacher's workspace, so they feel themselves in a natural environment and do not have to walk a long distance in order to cooperate with a colleague (Stoll et al., 2006).

Conclusions and Implications

It was revealed that in order to strengthen the collaboration, the system of teachers' professional development and performance assessment should take into account the factors existing both at the state and school levels. It can be said that most of the factors related to school are related to the approaches used by school leaders, namely, the right attitude of the leaders, the teachers' involvement in making decisions, the existence of preset goals, work schedules and space. There were respondents who pointed to the role of teachers' personal attitudes in the implementation of collaborative activities.

The result of the present research is especially important in the conditions when the establishment of a system of teachers' continuous professional development at the school base is one of the strategic tasks within the scope of the education and science of Georgia in 2022-2030. The results of the research fill the void that exists in the field in the sense of evidence-based decision-making up to date.

A research study in the future regarding the personal factors affecting the formation of teacher's attitudes will be interesting in order to develop and implement the professional development system through teachers' collaboration at the school base both in the Georgian context and in other countries. For example, how teacher openness, self-assessment, the sense of self-efficacy, etc. affect teachers' collaboration.

Recommendations

Based on the results of the presented research, in order to promote teachers' collaboration within the scope of the centralized system of teacher's professional development and performance assessment, recommendations can be formulated at several levels:

At the state level:

- In order to conduct activities within the scope of the centralized system of teacher's professional development and performance assessment, the school should evaluate the teacher using only the developmental assessment. The resulting developmental evaluation should be based on the teacher's self-assessment, as well as the feedback from colleagues and the analysis of students' results. This, in turn, will increase the teacher's openness to constructive criticism and, in general, will facilitate the formation of a school culture based on trust.
- Cooperative activities at school should be given a systematic and stable character - for this the following are important: a. The change in the centralized system of teacher's professional development and performance assessment should be based on the research of necessities and be justified; this is important in the conditions when the new National Strategy of Education and Science for 2022-2030 contributes to the introduction of an evidence-based approach, as indicated in the relevant declaration of the Government of Georgia. b. Sufficient time should be dedicated within the scope of

the teacher's working day schedule - "the teacher should know that collaboration with a colleague is exactly the same kind of activity as, for example, conducting a lesson".

- This will enable the teacher to better understand both their own role and that of their colleagues in the success of each student and the development of the school in general.

- Each school should be given the opportunity to implement appropriate models of teachers' collaboration and purposive activities based on the diagnostics of its necessities. As a result, the teacher and the school will transform from the passive receiver of the activities into the role of a "customer", which will increase the sense of joint participation. Implementation of collaborative activities will be determined by teachers' inner motivation.
- In teachers' professional development projects, topics focused on the study and use of collaborative forms should be enhanced, for example, coaching, study groups, critical friend, lesson study, etc. And in the professional development projects for school leaders the topics related to the creation of an environment supporting collaborative activities should be enhanced.
- The efforts made by the teacher in the process of collaboration should be recognized by the state when assessing the teacher's activity.
- At the level of educational resource centers⁵ and other relevant bodies of the Ministry, physical spaces may be organized, as well as joint conferences, seminars, and spaces must exist in social and professional networks. Functioning of associations of teachers by subject or methods, etc. should be encouraged.

At the school level:

- School leaders should support and recognize the teachers' collaborative activities which may be expressed in the following: a. To set expectations for teachers in the direction of collaboration; b. To allocate appropriate resources (including physical environment) and facilitate process efficiency in logistics, for example, modifying the lesson table as needed; c. The effort put by the teacher to implement/initiate collaborative activities should be recognized at the school level. d. Within the scope of management, the school leaders should themselves set an example of shared leadership and responsibility; e. Encouraging teachers' initiatives and leadership in various fields should be facilitated, which will increase their sense of responsibility and inner motivation.
- The school leaders should ensure the formation of a school culture and the development of appropriate mechanisms that will contribute to the dissemination of the experience gained from various projects focused on strengthening the teachers' collaboration and the sustainability of the results at school.
- The objectives set for teachers in the direction of collaboration should be in compliance with the daily practice of teachers, they should have to deal with tasks that relate to the results of students, collaboration with parents and community, etc. In this case, the teacher perceives the mentioned process as the means to achieve the set goal, and not as an isolated activity within the scope of their performance.
- The structural organization of the school should be democratic, providing the opportunity for participation in decision-making, for example, through effective functioning of collegial structures.

At the individual level:

- Teachers should ensure that they undergo professional development trainings and other programs that will increase their readiness to utilize collaborative activities, such as peer coaching, the critical friend model, joint lesson studying, etc.

⁵ Educational resource center - the territorial body of the Ministry of Education and Science of Georgia in cities and districts.

- Teachers should ensure to use the forms of teachers' professional development at the school base that actually correspond to the challenges and needs found within their practice.
- School leaders should ensure to undergo professional development trainings or other programs that will increase their readiness to support collaborative activities, such as peer coaching, critical friend models, joint lesson studying, etc.
- Those teachers who have the experience of conducting collaborative activities in various projects should share their knowledge with their colleagues and contribute to the dissemination of activities carried out within the scope of individual programs at the school level.

Declaration of Interest

The authors declare no competing interest.

References

- Alkhawaldeh, A. (2018). School-based teacher training in Jordan: Towards on-school sustainable professional development. *Journal of Teacher Education for Sustainability*, 19(2), 51-68. <https://doi.org/10.1515/jtes-2017-0014>
- Akpan, V. I., Igwe, U. A., Mpamah, I. B. I., & Okoro, C. O. (2020). Social constructivism: Implications on teaching and learning. *British Journal of Education*, 8(8), 49-56. <https://www.eajournals.org/wp-content/uploads/Social-Constructivism.pdf>
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16.
- Aspfors, J., & Bondas, T. (2013). Caring about caring: Newly qualified teachers' experiences of their relationships within the school community. *Teachers and Teaching*, 19(3), 243-259. <https://doi.org/10.1080/13540602.2012.754158>
- Angus-Cole, K. (2022, June 2022). Education brief: Teacher professional development. Cambridge Assessment International Education. <https://www.cambridgeinternational.org/Images/621009-teacher-professional-development-facsheet.pdf>
- Baroda, S., Sharma, C., & Bhatt, J. K. (2012). 360degree feedback appraisals - An innovative approach of performance management system. *International Journal of Management & Information Technology*, 1(2), 53-66. <https://doi.org/10.24297/ijmit.v1i2.1447>
- Bautista, A., & Ortega-Ruiz, R. (2015). Teacher professional development: International perspectives and approaches. *Psychology, Society, & Education*, 7(3), 240-251. <https://doi.org/10.25115/psye.v7i3.1020>
- Bochorishvili, M., & Inasaridze M. (2014). *School-based teachers' professional development - A practical guide* [in Georgian]. National Center for Teachers Professional Development.
- Borko, H., Jacobs, J., & Koellner, K. (2010). Contemporary approaches to teacher professional development. *International Encyclopedia of Education* (Third Edition), 548-546. <https://doi.org/10.1016/B978-0-08-044894-7.00654-0>
- Brown, G., Gebriel, A., & Michaelides, M. P. (2018). Teachers' conceptions of assessment: A global phenomenon or a global localism. *Frontiers in Education*, 4(16). <https://doi.org/10.3389/feduc.2019.00016>
- Carroll, K., Patrick S. K., & Goldring, E. (2021). School factors that promote teachers' collaboration: Results from the Tennessee instructional partnership initiative. *American Journal of Education*, 127(4), 501-530. <https://doi.org/10.1086/715002>
- Cheng, M. M. H., & So, W. W. M. (2012). Analyzing teacher professional development through professional dialogue: An investigation into a university-school partnership project on enquiry learning. *Journal of Education for Teaching*, 38(3), 323-341. <https://doi.org/10.1080/02607476.2012.668331>

- Cheung, F. W. M., & Cheng, C. Y. (2002). An outlier study of multilevel self-management and school performance. *School Effectiveness and School Improvement, 13*(3), 253-290. <https://doi.org/10.1080/02607476.2012.668331>
- Clement, M., & Vandenberghe, R. (2000). Teachers' professional development: A solitary or collegial (ad) venture? *Teaching and Teacher Education, 16*(1), 81-101. [https://doi.org/10.1016/S0742-051X\(99\)00051-7](https://doi.org/10.1016/S0742-051X(99)00051-7)
- Cohen, J., & Goldhaber, D. (2016). Building a more complete understanding of teacher evaluation using classroom observations. *Educational Researcher, 45*(6), 378-387. <https://doi.org/10.3102/0013189X16659442>
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge. <https://doi.org/10.4324/9781315456539>
- Datnow, A., Park, V., & Kennedy-Lewis, B. (2012). High school teachers' use of data to inform instruction. *Journal of Education for Students Placed at Risk (JESPAR), 17*(4), 247-265. <https://doi.org/10.1080/10824669.2012.718944>
- Demir, B. S. (2021). The characteristics of teachers in effective schools: A secondary analysis of TALIS. *International Online Journal of Education and Teaching (IOJET), 8*(1), 525-545.
- Durksen, T. L., Klassen, R. M., & Daniels, L. M. (2017). Motivation and collaboration: The keys to a developmental framework for teachers' professional learning. *Teaching and Teacher Education, 67*(2017), 53-66. <https://doi.org/10.1016/j.tate.2017.05.011>
- Geshel, M. E. (2017). International teachers' perceptions of leadership practices for effective teacher evaluations: A qualitative case study (Thesis, Concordia University, St.Paul). https://digitalcommons.csp.edu/cup_commons_grad_edd/137
- Gibbs, G. (1988). *Learning by doing: a guide to teaching and learning methods*. Oxford Brookes University.
- Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record: The Voice of Scholarship in Education, 109*(4), 877-896. <https://doi.org/10.1177/016146810710900401>
- Gronn, P., & Hamilton, A. (2004). 'A bit more life in the leadership': Co-principalship as distributed leadership practice. *Leadership and Policy in Schools, 3*(1), 3-35. <https://doi.org/10.1177/016146810710900401>
- Guest, G., Namey, E. E., Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research*. SAGE Publications.
- Gumus, S., Bulut, O., & Bellibas, M. S. (2013). The relationship between principal leadership and teacher collaboration in Turkish primary schools: A multilevel analysis. *Education Research and Perspectives, 40*(1), 1-29. <https://eric.ed.gov/?id=EJ1007185>
- Hall, G. E., & Hord, S. M. (2015). *Implementing change: Patterns, principles, and potholes*. University of Nevada.
- Hargreaves, D. H. (1999). The knowledge-creating school. *British Journal of Educational Studies, 47*(2), 122-144. <https://doi.org/10.1111/1467-8527.00107>
- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. Cassell.
- Hargreaves, A. (2019). Teacher collaboration: 30 years of research on its nature, forms, limitations, and effects. *Teachers and Teaching, 25*(5), 603-621. <https://doi.org/10.1016/j.tate.2017.05.011>
- Hindin, A., Morocco, C. C., Mott, E. A., & Aguilar, C. M (2007). More than just a group: Teacher collaboration and learning in the workplace. *Teachers and Teaching, 13*(4), 349-376. <https://doi.org/10.1080/13540600701391911>
- Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). *Cultures and organizations: Software of the mind (3rd ed)*. Geert Hofstede BV.
- Honingh, M., & Hooge, E. (2014). The effect of school-leader support and participation in decision making on teacher collaboration in Dutch primary and secondary schools. *Educational Management Administration & Leadership, 42*(1), 75-98. <https://doi.org/10.1177/17411432134992>
- Inasaridze, M., Lobzhanidze, S., & Ratiani, M. (2015). Successes and problems of school-based teacher professional development program (case study from Georgia). *Andragoški Glasnik, 19*(1-2), 65-72.

- Jao, L., & McDougall, D. (2016). Moving beyond the barriers: Supporting meaningful teacher collaboration to improve secondary school mathematics. *Teacher Development*, 20(4), 557-573. <https://doi.org/10.1080/13540600701391911>
- Johnson, D. H., & Johnson, F. P. (2013). *Joining Together: Group theory and group skills* (11th ed). Pearson.
- Kane, T. J., Kerr, A. K., & Pianta, R. C. (2014). *Designing teacher evaluation systems: New guidance from the measures of effective teaching project*. John Wiley & Sons.
- Kazemi, E., Ghousseini, H., Cordero-Siy, E., Prough, S., McVicar, E., & Resnick, A. F. (2021). Supporting teacher learning about argumentation through adaptive, school-based professional development. *ZDM – Mathematics Education*, 56(4), 435-447. <https://doi.org/10.1007/s11858-021-01242-5>
- Kelchtermans, G. (2006). Teacher collaboration and collegiality as workplace conditions review. *Zeitschrift für Pädagogik*, 52(2), 220-237.
- Koh, K. H. (2011). Improving teachers' assessment literacy through professional development. *Teaching Education*, 22(3), 255-276. <https://doi.org/10.1080/10476210.2011.593164>
- Kolleck, N. (2019). Motivational aspects of teacher collaboration. *Frontiers in Education*, 4(122). <https://doi.org/10.3389/educ.2019.00122>
- Levine, T. H., & Marcus, A. S. (2009). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education*, 26(3), 389-398. <https://doi.org/10.1016/j.tate.2009.03.001>
- Lobzhanidze, S., & Kirvalidze, M. (2019). The factors affecting teacher collaboration and their management possibilities in the Georgian context [in Georgian]. *Science of Education*, 1(1).
- Marshall, C., & Rossman, G. B. (2016). *Designing Qualitative Research* (6th ed.). Sage.
- Merriam, S. B. (2002). *Qualitative Research in Practice: Examples for discussion and analysis*. Jossey-Bass Publishers.
- Minckler, C. H. (2013). School leadership that builds teacher social capital. *Educational Management Administration & Leadership*, 42(5), 657-679. <https://doi.org/10.1177/1741143213510502>
- Mizell, H. (2010). *Why professional development matters*. Learning Forward.
- Muijs, D. (2008). 'Widening opportunities? a case study of school-to-school collaboration in a rural district'. *Improving Schools*, 11(1), 61-73. <https://doi.org/10.1177/1365480207086755>
- Murawski, W. W., & Swanson, H. L. (2001). A meta-Analysis of co-Teaching research. *Remedial and Special Education*, 22(5), 258-267. <https://doi.org/10.1177/074193250102200501>
- Nizharadze, G. (2001). Georgian culture: feminine, masculine, childish. *Magazine Time of Peace*, 2, 79-82.
- OECD (2019), TALIS 2018 Results (Volume I): Teachers and school leaders as lifelong learners, TALIS, OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>
- OECD (2020), TALIS 2018 Results (Volume II): Teachers and school leaders as valued professionals, TALIS, OECD Publishing. <https://doi.org/10.1787/19cf08df-en>
- Patton, M. (1980). *Qualitative evaluation methods*. Sage Publications.
- Porter, A. N., & Peters-Burton, E, E. (2021). Investigating teacher development of self-regulated learning skills in secondary science students. *Teaching and Teacher Education*, 105. <https://doi.org/10.1016/j.tate.2021.103403>
- Professional Standard for Teachers. (2020). <https://matsne.gov.ge/ka/document/view/4907094?publication=0>
- Report of the Review to Achieve Educational Excellence in Australian Schools (2018). Commonwealth of Australia. <https://www.education.gov.au/quality-schools-package/resources/through-growth-achievement-report-review-achieve-educational-excellence-australian-schools>
- Schon, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.
- Shakenova, L. (2017). The theoretical framework of teacher collaboration. *Khazar Journal of Humanities and Social Sciences*, 20(2), 34-48. <https://doi.org/10.5782/2223-2621.2017.20.2.34>
- Shapiro, M., Nakata, S., Chakhaia, L., Zhvania, E., Babunashvili, G., Pruidze, N., & Tskhomelidze, M. (2007). *Evaluation of the Ilia Chavchavadze program in reforming and strengthening Georgia's schools*. Padeco. https://mes.gov.ge/upload/multi/geo/1209037866_IC%20Evaluation%20Report%20200%20Final.pdf

- Silins, H., & Mulford, B. (2002). Schools as learning organizations: The case for system, teacher and student learning. *Educational Administration*, 40(5), 425-446. <https://doi.org/10.1108/09578230210440285>
- Silva, J. C., & Morgado, J. (2004). Support teachers' beliefs about the academic achievement of students with special educational needs. *British Journal of Special Education*, 31(4), 207-214. <https://doi.org/10.1111/j.0952-3383.2004.00356.x>
- Spillane, J. P., Kim, C. M., & Frank, K. A. (2012). Instructional advice and information providing and receiving behavior in elementary schools: Exploring Tie Formation as a building block in social capital development. *American Educational Research Journal*, 49(6), 1112-1145. <https://doi.org/10.3102/0002831212459339>
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7, 221-258.
- Strahan, D. (2003). Promoting a collaborative professional culture in three elementary schools that have beaten the odds. *The Elementary School Journal*, 104(2), 127-146. <https://doi.org/10.1086/499746>
- Stronge, J. H. D., & Tonneson, V. C. (2015). *Teacher effectiveness performance evaluation system handbook*. Stronge&associate-educational consulting, LLC.
- Svendsen, B. (2016). Teachers' experience from a school-based collaborative teacher professional development programme: Reported impact on professional development. *Teacher Development*, 20(3), 313-328. <https://doi.org/10.1080/13664530.2016.1149512>
- Teacher's Professional Standard. (2020). <https://matsne.gov.ge/ka/document/view/4841342?publication=0tpdc.ge/geo/->
- Unified national strategy of education and science of Georgia 2022-2030. <https://mes.gov.ge/content.php?id=7755&lang=geo>
- Wambugu, P. W., Stutchbury, K., & Dickie, J. (2019). Challenges and opportunities in the implementation of school-based teacher professional development: A case from Kenya. *Journal of Learning for Development*, 6(1), 76-82. <https://files.eric.ed.gov/fulltext/EJ1212508.pdf>
- Wyckoff, M. J., Katz, V., & Luke, C. (2019). *Review of teacher evaluation systems in the United States: technical report and comparative analysis. Background study for the inter-American development bank project "Measuring teacher effectiveness in Latin America"*. Inter-American Development Bank.
- Zembylas, M., & Barker, H. B. (2007). Teachers' spaces for coping with change in the context of a reform effort. *Journal of Educational Change*, 8(3), 235-256. <https://doi.org/10.1007/s10833-007-9025-y>

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Marika Kirvalidze
(Corresponding author)

PhD Student, Invited Lecturer, Ilia State University, 3/5 Cholokashvili av., 0162 Tbilisi, Georgia.
E-mail: marika.kirvalidze.1@iliauni.edu.ge
ORCID: <https://orcid.org/0000-0001-5333-618X>

Sofiko Lobzhanidze

Doctor of Pedagogical Sciences, Professor, Ilia State University, 3/5 Cholokashvili av., 0162 Tbilisi, Georgia.
E-mail: sopiko_lobjanidze@iliauni.edu.ge
ORCID: <https://orcid.org/0000-0002-5429-3369>