

# Teacher Collaboration in the Democratic Republic of the Congo: A Look at Supervisor Skills

Eloi Luheho Mbetengoy<sup>1</sup> & Yamina Bouchamma<sup>1</sup>

<sup>1</sup> Faculty of Education Sciences, Laval University, Quebec, Canada

Correspondence: Eloi Luheho Mbetengoy, Faculty of Education Sciences, Laval University, Quebec, Canada

Received: April 8, 2022

Accepted: May 13, 2022

Online Published: September 26, 2022

doi:10.5539/ies.v15n5p87

URL: <https://doi.org/10.5539/ies.v15n5p87>

## Abstract

This study identifies the competencies used by supervisors of teacher professional learning circles and examines those which should be developed to improve the facilitation practices of these leaders. Based on the competency standards for school principals in professional learning communities (Bouchamma, Basque, Giguère, & April, 2020), we conducted semi-structured interviews with supervisors of professional learning circles (*cellule de base*) and pedagogical units (N = 24) in the Democratic Republic of the Congo. Content analysis results show that although the professional learning circle supervisors in this study possessed 53% of the standard competencies that made up our coding list, other skills must be developed, or enhanced to lead teacher collaboration activities more effectively. The discussion highlights these competencies to better inform and engage learning circle supervisors in this professional development process.

**Keywords:** teacher collaboration, collective teacher supervision, competencies, competency profile, cellule de base, learning circle, pedagogical unit, professional learning community

## 1. Introduction

In the twenty-first century, collaboration is listed among the competencies that contribute to personal and professional success (Romero, Lille, & Patino, 2017). In the realm of education, collaboration promotes teacher professional development (Leclerc, 2012; Prud'Homme & Leclerc, 2014) and also improves the quality of student learning and achievement because it encourages teacher commitment to their professional growth process (Organisation de Coopération et de Développement Economiques [OCDE], 2020).

In the Democratic Republic of the Congo (DRC), collaboration is deemed a priority to revitalize the role of the pedagogical supervisor. Teacher supervision thus serves to promote interactions between teachers in professional learning circles or units to actively support co-training through the sharing and exchange of experiences, encourage collective practice-related problem solving, reinforce the knowledge gained during each professional development activity, and facilitate the application of pedagogical innovations emerging through targeted reforms (Ministère de l'Enseignement Primaire, Secondaire et Technique [MEPST], Ministère de l'Enseignement Supérieur [MESU] et Ministère des Affaires sociales, 2015).

This new orientation calls for the total commitment of school leaders who must integrate these professional activities within the school schedule and transform their schools into professional learning circles or communities (known as *cellules de base* in the DRC). They also assign their teachers to different pedagogical sub-units and ensure their regular guidance and supervision (MEPST et al., 2015). Principals must therefore exercise strong and effective pedagogical leadership to mobilize their teachers toward these collaboration initiatives and help them collectively develop and nurture an ideal teaching strategy that will contribute to their professional development (MEPST et al., 2015).

In light of these new responsibilities of school principals, we sought to identify the competencies used by school leaders and unit supervisors to facilitate and guide the collaboration activities of secondary teachers.

## 2. Literature Review

In this section, we present the key notions pertaining to collective teacher supervision and professional competency as well as a review of various teacher collaboration initiatives.

### *2.1 Collective Teacher Supervision*

Collective teacher supervision is an alternative to individual pedagogical supervision, which requires a significant amount of time and energy (Bouchamma, Giguère, & April, 2019; Nolan & Hoover, 2008). This type of supervision takes place in a professional learning community setting. The facilitators divide the teachers into small heterogeneous groups where they collectively work, learn, and progress in their knowledge acquisition and development toward a specific objective, namely, improving student outcomes. These heterogeneous units follow a four-step process that is optimized through the competencies deployed by the group leaders or supervisors. The four steps are: (1) study a situation using data analysis; (2) reflect on the situation by identifying “what is” and “what should be”; (3) plan interventive actions and determine the roles of each member; and (4) execute the plan in strict compliance with established protocols (see Lezote & McKee (2002) in Prud’homme & Leclerc, 2014).

### *2.2 Competencies to Supervise Collaboration Activities*

Several studies have examined school principals’ leadership skills for effective school management or improved pedagogical supervision (Bouchamma, Basque, Giguère, & April, 2020; Ministère de l’Éducation, du Loisir et de Sport [MELS], 2008). In the present study, competence is understood as the ability to act and to succeed in various professional situations that may arise in a profession or an occupation. This supposes that the individual involved knows how to choose and put into action professional practices that are not only relevant but effective (Le Boterf, 2006).

### *2.3 Teacher Collaboration Activities*

The literature shows three significant predictors related to successful schools, namely, effective teaching strategies, student learning data, and collaborative teamwork (Prud’homme & Leclerc, 2014). The latter consists in bringing together teachers who have enough trust in each other and who have the desire to work together during a period of time to ensure the transfer of expertise from one person to another (Prud’homme & Leclerc, 2014). In this collective supervision setting, the principal/supervisor encourages their teachers to adopt winning practices to support the achievement of the greatest number of students (Bouchamma et al., 2019). Indeed, much research has delved into these effective collaboration practices and their positive impact on school performance, teacher welfare, and the empowerment developed through these actions (Bouchamma, Savoie & Basque, 2012; Jacquet & Dagenais, 2010; OCDE, 2020; Snyder & Bae, 2017).

In Canada, earlier studies identified two dimensions in teacher teamwork: formal activities such as participation in meetings, joint tasks, pedagogical days, etc., and informal activities involving the exchange of ideas or materials, such as, for example, conversations in the teachers’ lounge (Tardif & Lessard, 1999). Other Canadian studies revealed factors that notably characterize teacher collaboration. During planning, school-related variables such as the principal’s leadership practices and variables related to time and material resources were shown as the best predictors of teacher collaboration. In the area of lesson planning, school- and teacher-related variables were found to be the greatest predictors of teacher collaboration (Bouchamma et al., 2012).

A recent international study (OECD, 2020) investigated how teachers around the world collaborate with their colleagues and identified differences in the culture of collaboration between countries and even within countries. Teacher collaboration activities are divided into two categories: those limited to discussion and coordination and those devoted to professional collaboration. The activities in the latter category are understood as representing the most widely used form of collaboration between teachers.

In the education system of the DRC, where collaboration between teachers is emphasized in the country’s 2016-2025 sectorial strategy on education and training, the third tier of this project’s support actions (Inspection générale [IGE], 2010) proposes a series of collaborative activities which the teachers are asked to undertake as a pedagogical team or unit. These activities are similar to those presented by the OECD (2020) and most of them are found in the first category. Those in the second category pertain to the pedagogical unit supervisor’s visit with the teachers and the lesson demonstration, which enables a teacher who has developed expertise or has mastered a training tool to share their knowledge with the other group members (Lupungana, 2010).

Table 1 summarizes the two types of collaboration activities according to the OECD (2020) and categorizes those existing in the education system of the DRC.

Table 1. Teacher collaboration activities according to the OECD (2020) and the DRC (IGE, 2010)

Category 1 (OECD, 2020)	Category 1 (IGE, 2010)
<b>Pedagogical Discussion and Coordination</b>	
<ul style="list-style-type: none"> <li>- Participate in the discussion on the progress of certain students.</li> <li>- Share teaching materials with colleagues.</li> <li>- Attend the team meetings.</li> <li>- Collaborate with other teachers in the school to use common assessment tools and processes to evaluate student progress</li> </ul>	<ul style="list-style-type: none"> <li>- Establish a list of all teaching methods currently used in the school.</li> <li>- Establish a list of training needs and tools.</li> <li>- Devise pedagogical documents (lesson plans, recaps for the students, among others).</li> <li>- Devise exercise and assessment questionnaires.</li> <li>- Determine, as a team, the course provisions for each subject.</li> <li>- Ensure the vertical integration of what is being taught.</li> <li>- Analyze how the learning is progressing.</li> <li>- Determine and organize the teaching activities for the week ahead.</li> <li>- Examine and analyze the students' outcomes.</li> <li>- Analyze the test questionnaires or multiple choice tests.</li> <li>- Prioritize problem solving.</li> </ul>
<b>Professional Collaboration</b>	
<ul style="list-style-type: none"> <li>- Co-teach in the same classroom.</li> <li>- Participate in group professional development activities.</li> <li>- Participate in group activities organized for several classrooms and age groups.</li> <li>- Do observations in colleagues' classes and provide feedback.</li> </ul>	<ul style="list-style-type: none"> <li>- Perform supervision visits.</li> <li>- Perform lesson demonstrations.</li> </ul>

In addition to reducing the sense of isolation experienced by teachers in their classrooms, these collaboration activities improve the school climate, stimulate group learning, reinforce the sense of collective accountability toward student learning, and contribute to the development of a solid community of practice (Bouchamma et al., 2020; Jacquet & Dagenais, 2010; Snyder & Bae, 2017; Wenger, 1998).

### 3. Theoretical Framework

The theoretical framework of his study is based on the principals' competency standards for the development and supervision of communities of practice (Bouchamma et al., 2020). This professional reference houses four main competency domains:

- 1) Human resources management, with three key competencies and 28 sub-skills;
- 2) Pedagogical management, with three key competencies and 18 sub-skills;
- 3) Data management, with one key competency and five sub-skills; and
- 4) Administrative management, with one key competency and four sub-skills.

Guided by this competency profile, we identified the competencies used by the supervisors of a secondary teachers' professional learning circle (*cellule de base*) to ensure the facilitation of the teachers' collaboration activities in their respective pedagogical units, as well as the competencies that needed to be acquired or developed.

### 4. Methodology

#### 4.1 Context of the Study and Participants

This study took place in the Congo Central, Equator, and Kinshasa provinces of the Democratic Republic of the Congo (DRC). In each province, two catholic secondary schools and two government-run secondary institutions were chosen on the basis of their performance, the number of organized options, and the age of each establishment. To obtain permission to conduct this research initiative, we collaborated with each province's diocesan coordinator for the catholic schools and the regional pool inspector (Inspool) for the state-run schools. Following their respective authorizations, we proceeded to constitute a judgement sampling (Fortin & Gagnon, 2016) of 24 participants that included 12 principals responsible for their teachers' professional learning circle (*cellule de base*)

and 12 pedagogical unit supervisors. The average age of the participants was 42 years and the average number of years of experience in the school was 3.80 years.

#### *4.2 Data Collection and Instrumentation*

The data collection took place between February and June of 2021 in each participant category. In each semi-structured interview, lasting an average of 40 minutes, the learning circle facilitators expressed their views on the organization of the learning circle, the constitution and function of each pedagogical unit, and collective teacher supervision activities. The pedagogical unit supervisors discussed leadership style, teacher participation, the various themes developed during the group meetings, data management, and the organization of their specific unit.

#### *4.3 Data Analysis*

Data analysis was performed according to the content analysis principles of Krippendorff (2018), which helped us to determine the meaning units of our corpus and list them in the closed coding scheme developed in our theoretical framework. We then matched each meaning unit with the different professional competencies required to effectively lead teacher collaboration activities, which led us to determine their presence or absence in the corpus. Finally, intercoder reliability was attained in the order of 80%, which was deemed satisfactory for the proposed research (Miles, Huberman, & Saldana, 2014).

### **5. Results**

The coding grid taken from the principals' competency profile (Bouchamma et al., 2020) was used to analyze the data to identify the competencies used by the learning circle leaders as well as the competencies these supervisors should develop in their practices. From a technical standpoint, we retained the original listing of these skills and sub-skills to more readily detect their presence or absence. Furthermore, to ensure participant confidentiality, we used the abbreviation "LCL" to designate the principal or leader in charge of a learning circle (LC) and the abbreviation "PUL" to designate the supervisor in charge of a pedagogical unit (PU).

#### *5.1 Domain 1. Human Resources Management*

The participating school leaders were shown to employ the three competencies required for human resource management: (1) manage the human aspects of the learning circle (LC) throughout its evolution; (2) ensure the competent action and professional growth of the LC members; and (3) ensure my own professional development. The sub-skills associated with each of these three competencies were partially present in our corpus, in reference to the competency profile. Indeed, of the 17 required sub-skills for this domain, 11 were present in the first competency. Of the six identified sub-skills in the second competency, four were present, and for the third competency containing five required sub-skills, only one was present. Overall, 16 of the 28 required sub-skills were present, corresponding to 57 %.

Table 2 presents a summary of these human resources management competencies and their respective sub-skills. The sub-skills marked with a hyphen (-) were absent from our study group, while those marked with a plus sign (+) were present.

Table 2. Summary of the competencies related to domain 1

Domain 1. Human Resources Management		
Competency 1. Manage the human aspects of the LC throughout its evolution	Competency 2. Ensure the competent action and professional growth of the LC members	Competency 3. Ensure my own professional growth and development
1.1 Analyze the school climate and that of the LC. (+)		
1.2 Understand the organizational culture and the specifics of the environment. (-)		
1.3 Establish a climate of trust in both the school and the LC. (+)		
1.4 Know the professional profile of each LC member. (+)		
1.5 Plan and organize the PU meetings. (+)		
1.6 Promote discussions, consultations, and reflection among the LC members. (+)		
1.7 Encourage the creation and consultation of interdependent teams. (-)	2.1 Promote and organize the professional growth activities of the LC members based on their needs. (+)	- Self-evaluate and identify my professional training needs. (-)
1.8 Actively listen to the members' needs and points of view. (+)	2.2 Teach the LC members to use relevant research data. (-)	- Get trained in pedagogical innovations and trends in this domain. (+)
1.9 Define the roles and responsibilities of each LC member. (+)	2.3 Supervise the LC members in their professional growth in compliance with the school's priorities and the students' needs. (+)	- Master the founding principles of the LC. (-)
1.10 Use shared leadership when making decisions in the LC. (+)	2.4 Encourage the LC members to self-evaluate and set development goals. (+)	- Know how to effectively facilitate a LC. (-)
1.11 Progressively introduce change in the LC. (-)	2.5 Guide the LC members toward greater autonomy. (+)	- Develop my continuing education plan. (-)
1.12 Use differentiated supervision depending on the characteristics of the LC members. (+)	2.6 Encourage other staff members to create one or more PUs. (-)	
1.13 Manage the conflicts in the LC. (-)		
1.14 Respond to the questions and concerns raised in the PU. (+)		
1.15 Provide the members with constructive feedback. (+)		
1.16 Show recognition for the personal and collective contributions and successes. (-)		
1.17 Share the results of the PU with the other members of the LC and district officials. (-)		
(+): 11/17 = 65 % (-): 06/17 = 35 %	(+): 4/6 = 67 % (-): 2/6 = 33 %	(+): 1/5 = 20 % (-): 4/5 = 80 %
Total number of (+): 16/28 = 57 % Total number of (-): 12/28 = 43 %		

### Competency 1. Manage the Human Aspects of the LC Throughout its Evolution

This competency is divided into 11 sub-skills.

Sub-Skill 1.1. Analyze the School Climate and That of the LC. The leaders of LCs analyzed the climate of their work environment and shared their perceptions regarding teacher involvement, motivation, and participation in the collaboration activities organized by these supervisors.

Regarding teacher engagement, some leaders estimated that the teachers showed interest in the collaboration activities: “They want to learn, everybody wants to become an expert, to be able to defend themselves” (PUL). Other participants spoke of the good work climate in their school and the mutual trust existing among the staff: “When I call a meeting, the teachers are always ready and willing; there’s a good ambiance. We respect each other, not only in terms of age but also in terms of our respective areas of expertise” (PUL).

For one LCL, their teachers’ participation was not always constant and a gap existed between the ideal situation and the actual situation:

...regarding the LC, there’s this ideal, what we hoped for, and what is actually going on. Very few of our teachers [...] who are concentrated on the task. In terms of their practices, they don’t spend enough time on scientific and sociological analysis. They only do a few very superficial reports... (LCL)

Other participating LC leaders attributed the lack of teacher commitment to the fact that some teachers are waiting for opportunities to leave their positions: “To be honest, they’re just there for appearances. It’s obvious. We’re a technical school. When the technicians find something better elsewhere, they hurry up and leave. So, the interest is just not there and it shows in their faces” (PUL).

Some of our participants attributed the lack of teacher participation to a lack of motivation exacerbated by the fact of being underpaid:

Teacher participation is all about motivation, and frankly [...], the motivation is just not there. When they are not paid positions, there is no financial gain or bonus. People even avoid responsibilities. They don’t want to get involved. They are passive because they feel that it’s adding a task to their workload. (PUL)

Sub-Skill 1.3. Establish a Climate of Trust in the School and in the Learning Circle. The LC leaders LC stated that they raised their teachers’ morale and understood that the challenges differed, depending on the teacher:

Teachers don’t all have the same level of morale, the same psychology, nor even the same motivation. Some are suffering and feel excluded from the group when they should feel included. We work constantly on boosting their morale to stimulate their interest in the activities of the learning circle. (LCL)

Sub-Skill 1.4. Know the Professional Profile of Each LC Member. The LC leaders declared being aware of the professional profile of their members: “We organize the LC by dividing the teachers according to their profile, with the more experienced ones mentoring the newer participants” (LCL). They also knew the latter’s status in the school: “Among our teachers [members], we have paid staff, unpaid staff, new units...” (LCL).

Sub-Skill 1.5. Plan and Organize the PU Meetings. The LCLs organized the teacher collaboration activities by including them in the school schedule:

...often, we schedule the meetings for each PU. When we do the schedule, we make sure that the PU meetings are held on a day when they are all there and we try to set up a time that is convenient for everybody. (LCL)

The pedagogical unit (PU) supervisors were also responsible for organizing their meetings:

As for the regular setting up of meetings, first we plan the agenda, then we summon the teachers three days before the meeting. A secretary takes notes and the meeting vice-president oversees things more than the members do. (PUL)

Sub-Skill 1.6. Promote Discussions, Consultations, and Reflection among the LC Members. The LCLs encouraged discussions and the sharing of expertise during the PU meetings:

When we get together, we share with the members; the sharing regards pedagogical action, the difficulties encountered in the classrooms, from the teachers’ transfer of knowledge on the subjects they teach to how the students come to assimilate this knowledge. (PUL)

Sub-Skill 1.8. Actively Listen to the Members’ Needs and Points of View. The LC leaders listened to their members’ needs by organizing a general assembly, at the end of each month, involving the leaders of each PU:

We have a habit, at least once a month, of scheduling a general assembly of our LC, where the different PU leaders are invited to come share their preoccupations, the difficulties they face in the instruction of

certain subjects, and how they are progressing. We listen to them and we work as much as possible on finding solutions. (LCL)

Sub-Skill 1.9. Define the Roles and Responsibilities of Each LC Member. At the beginning of each school year, the learning circle (LC) leaders determined the respective duties of each member of the pedagogical unit (PU):

In our PU, there is a president, a secretary, a vice-president, and the members. These duties do not rotate because at the start of each school year, the principal decides who does what and where. We don't hold an election; it's the principal who determines the role of each member in the PU. (PUL)

Sub-Skill 1.10. Use Shared Leadership When Making Decisions in the LC. Our interviewed leaders stated that they shared their leadership by allowing each member to intervene during the meetings: "During the meeting, we go around the table, the teachers present their problem situations, their difficulties. We work together to try to find a solution before submitting the situation to the education consultant" (PUL).

These leaders also mentioned appreciating the LC members' complementarity and personal experiences:

At the beginning of the year, each teacher contributes to the elaboration of our instructional provisions, the model lessons, where the other members of the PU become inspectors [supervisors] to observe their friend who is giving a class in a specific classroom, the assessment of our students' results in the different disciplines, the SERNAFOR [National Training Service] evaluations... (LCL)

Sub-Skill 1.12. Use Differentiated Supervision Depending on the Characteristics of the LC Members. The LCLs spoke of using differentiated supervision by promoting emulation and by attributing the right role to each member:

As the group's leader, we encourage emulation, so each member is in their rightful place. We try to remind each member of their role and responsibilities to stimulate their conscience and help them give their best effort. (PUL)

Sub-Skill 1.14. Respond to the Questions and Concerns Raised in the PU. The participating supervisors expressed that they examined the transcripts of each meeting to better respond to the preoccupations of the PU:

When we are given the report, we read it and we determine where the teachers are having difficulties. We seek out one of the more experienced teachers with this type of situation and we give them the opportunity to supervise by doing a lesson demonstration. (LCL)

Sub-Skill 1.15. Provide the Members with Constructive Feedback. The LC leaders dispensed constructive feedback when doing their supervision visits by taking on the role of supervisor (inspecteur) to help the teachers improve their practices: "We do supervision visits. We become inspectors. After the visit, we give feedback during the meeting to help us improve" (PUL).

Competency 2. Ensure the Competent Action and Professional Growth of the LC Members

This competency is divided into four sub-skills.

Sub-Skill 2.1. Promote and Organize the Professional Growth Activities of the LC Members Based on their Needs. The LC leaders viewed this as a small form of local training and organized lesson demonstrations for teacher professional development purposes:

In this country, we have qualified teachers and others who are less qualified, even underqualified, inexperienced. They have the diploma but maybe it's the first time they are actually teaching. The cellule de base [professional learning circle] becomes a little local training centre where the more experienced ones help the younger ones. (LCL)

Sub-Skill 2.3. Supervise the LC Members in their Professional Growth in Compliance with the School's Priorities and the Students' Needs. The LC leaders encouraged their teachers to be creative and welcomed the latter's use of new materials for their professional development: "Aside from the training actions in our PUs, we ask the teachers to think of ways to develop training tools [...]. Also in our PUs, they propose books to buy, materials to acquire..." (LCL).

Sub-Skill 2.4. Encourage the LC Members to Self-Evaluate and Set Development Goals. The LC leaders gave the members the opportunity to evaluate the goals they had set for themselves at the end of each school term or trimester:

Throughout the year, at each trimester, we meet to determine if we've met the goals of this trimester. If the answer is yes, we say OK, let's look at the planned content for next trimester; if we've not achieved it, we talk it over, we tell ourselves that as teachers, we must do everything we can to catch up before we can move on. (PUL)

Sub-Skill 2.5. Guide the LC Members Toward Greater Autonomy. The LCLs showed greater interest in their new teachers in an effort to help them become more productive and able to teach like the others:

We do everything we can to help the new teachers become productive, to raise their teaching to the same level as the others. They must be well trained to be able to [eventually] replace their older colleagues. (LCL)

### Competency 3. Ensure My Own Professional Growth and Development

This competency contains one sub-skill.

Sub-Skill 3.2. Seek Training in Pedagogical Innovations and Trends in this Domain. Current trends in education include promoting collegiality in schools. In our study, the LC leaders were shown to express the intent to become a collaborative team:

... as school principal, we, along with our teachers, must learn teamwork. The teachers have not learned how to work as a team; they've only learned to work alone. They believe that it's more effective that way. So, we have to learn to collaborate together, we have to learn to listen to each other. We have to learn how to complete each other. (LCL)

### 5.2 Domain 2. Pedagogical Management

This domain is composed of three competencies: (1) Create a LC focusing on the students' educational needs and achievement (8 sub-skills); (2) Guide the LC members to learn and apply the teaching practices best suited to the students' needs (4 sub-skills); and (3) Support the development of collaborations and partnerships devoted to student achievement (6 sub-skills). The signs (+) and (-) following each of these sub-skills (Table 3) respectively indicate their presence or absence in our corpus.

For competency 4, three sub-skills were observed, for competency 5, all four sub-skills were present, and for competency 6, three sub-skills were present. In total, 10 out of 18 sub-skills were evidenced (56%).

Table 3. Summary of the competencies related to domain 2

Domain 2. pedagogical management		
Competency 4. Create a LC that focuses on the students' educational needs and achievement	Competency 5. Guide the LC members to learn/apply teaching practices that best suit the students' needs	Competency 6. Support the development of collaborations/partnerships devoted to student achievement
4.1 Understand the school's challenges regarding student achievement. (+)		
4.2 Know the students' characteristics. (+)		
4.3 Collectively determine our priorities regarding student achievement. (-)	5.1 Bring the members to share and use new teaching practices that are adapted to their students' needs. (+)	- Call upon inspectors for specific expertise. (+)
4.4 Share my pedagogical vision of the LC, its orientations, and its educational values. (-)	5.2 Encourage the members to share and use new didactic tools that are adapted to their students' needs. (+)	- Promote the involvement of non-teaching staff in the PU, when needed. (-)
4.5 Encourage the adoption of a common vision and the pursuit of shared goals in the LC. (-)	5.3 Guide the LC members in the choice and application of effective teaching and assessment practices. (+)	- Solve problems collaboratively. (-)
4.6 Ensure that the LC activities comply with national and local education policies. (+)	5.4 Promote continuity and coherence in the teaching practices of the LC members. (+)	- Encourage peer collaborations. (+)
4.7 Set student achievement goals and make decisions using student data. (-)		- Develop collaborations with community partners and other education environments. (-)
4.8 Devise the school's educational project and an annual action plan to meet the established objectives. (-)		- Collaborate with PUs in other schools. (+)
(+): 3/8 = 37 %	(+): 4/4 = 100 %	(+): 3/6 = 50 %
(-): 5/8 = 63 %	(-): 0	(-): 3/6 = 50 %
Total number of (+): 10/18 = 56 %		
Total number of (-): 08/18 = 44 %		



#### Competency 4. Create a LC Focusing on the Students' Educational Needs and Achievement

This competency presents three sub-skills.

Sub-Skill 4.1. Understand the School's Challenges Regarding Student Achievement. The group leaders invested in their LC (cellule de base) by regularly scheduling meetings:

To make our teachers' learning circle [cellule de base] more dynamic, we have to make sure that our meetings are held on a regular basis to improve the school's performance and that we receive the meeting reports to help us better intervene. (LCL)

The leaders also addressed the challenge of helping the students to learn the authorized languages used in the school: "The challenge regards the languages: French and English. We are having a hard time. The children prefer to speak Lingala. We ask the teachers to encourage the children to speak in French" (LCL).

Sub-Skill 4.2. Know the Students' Characteristics. The LC supervisors knew the characteristics of the students in their school because of their interest in the latter's learning and academic development:

In our school, we have strong students who are more intelligent, and others who are less intelligent. We make sure that all of these students acquire the necessary skills for their successful integration into society. We are proud of this. To achieve this goal, the actions we take with our teachers must help them effectively do their job. (LCL)

Sub-Skill 4.6. Ensure that the LC Activities Comply with National and Local Education Policies. The LC activities organized by the supervising leaders were shown to respect the school calendar, established curricular provisions, and national education programs and policies:

In our learning circle [cellule de base], we follow the established calendar and the prescribed provisions for our courses. We don't want to fall behind. If this happens in our schedule and in our prescribed content, the children won't be able to perform on their final exams or the national assessment. (LCL)

#### Competency 5. Guide the LC Members to Learn and Apply Teaching Practices that Best Suit the Students' Needs

This competency is composed of four sub-skills.

Sub-Skill 5.1. Bring the Members to Share and Use New Teaching Practices That are Adapted to their Students' Needs. The LCLs displayed this particular skill by showing their interest in teaching innovations and teamwork:

Each time there are innovations, we have to sit down in the learning circle [cellule de base] and discuss them. Take French, for example. We recently elaborated a new content provision with new sequences. The PU meetings enable the members to review what they did last year and compare with the coming year. (LCL)

Sub-Skill 5.2. Encourage the Members to Share and Use New Didactic Tools that are Adapted to their Students' Needs. Our participating LC supervisors demonstrated this skill, for example, by providing their teachers with opportunities to learn practices that they had not learned during their initial training:

In the pedagogical units, the teachers meet with colleagues who have difficulties to help them be as productive as the others are. They even have meetings to learn things they didn't acquire when they were at the ISP, such as, for example, the course planning tool. (LCL)

Sub-Skill 5.3. Guide the LC Members in the Choice and Application of Effective Teaching and Assessment practices. The LCLs used this skill when they enabled the teachers to use common assessment practices: "The teachers collaborate to develop common assessment methods, come exam time. However, during a class period, each teacher uses their own formative assessments" (PUL).

Sub-Skill 5.4. Promote Continuity and Coherence in the Teaching Practices of the LC Members. This skill was used by the LC leaders who were attentive to the instructional schedule and how teaching was progressing in the classrooms:

Overall, when you work in a PU, you see the results in the end, we see a sequence taking place in how this or that branch is developing. In past years, the sixth-grade math teachers had trouble because this or that chapter had not been done. We don't have these complaints anymore. The PU ensures coherence. (LCL)

#### Competency 6. Support the Development of Collaborations and Partnerships Devoted to Student Achievement

Regarding this competency, our participating principals and supervisors stated that they (1) called upon an inspector for specific expertise (SS 6.1), (2) encouraged peer collaboration (SS 6.4), and (3) established ties with

PUs in other schools (SS 6.6).

When we find that, pedagogically, we are not equipped to solve the problems the teachers present to us, we bring in an inspector. They are there to train, control, and also facilitate. They come in and together we organize what we call training actions. (LCL)

There's a sharing of experience in the PU. Those have a lot of work experience, expertise, who have a solid "backbone", as we say, when they give their classes, the others can follow them from a distance and can consult their lesson planner. This actually generates interest and contributes to the teachers' professional development. (LCL)

Lately, we hosted teachers from three schools. They came to join our teachers to benefit a bit from our experience to consolidate and improve their teaching skills. They appreciate us now. We've just been solicited by the Head of Institute X and we'll be working with them on March 18th. (LCL)

### 5.3 Domain 3. Data Management

Table 4 shows that the LC supervisors used none of the sub-skills related to this domain.

Table 4. Summary of the competencies related to domain 3

Domain 3. Data Management	
Competency 7.	
Supervise the LC members' analysis of student data	
7.1	Understand the foundations of accountability policies. (-)
7.2	Supervise the data collection and analysis process in the LC. (-)
7.3	Equip the LC members to make better decisions after analyzing their students' data. (-)
7.4	Oversee the attainment of achievement goals. (-)
7.5	Bring the LC members to be collectively accountable for their students' success. (-)
Total number of (+): 0/5 = 0 %	
Total number of (-): 5/5 = 100 %	

### 5.4 Domain 4. Administrative Management

In this domain, the LC leaders used three sub-skills: Provide the LC members with the material resources; organize the teachers' schedule to enable them to attend the LC meetings; and make LC supervision a priority. These sub-skills (Table 5) accounted for 75 % of the entire group of sub-skills.

Table 5. Summary of the competencies related to domain 4

Domain 4. Administrative Management	
Competency 8.	
Efficiently and effectively manage the financial/material/temporal resources of the LC	
8.1	Financially support the pedagogical projects and training needs of the LC members. (-)
8.2	Provide material resources to the LC members. (+)
8.3	Arrange the teachers' schedule to allow them to attend the LC meetings. (+)
8.4	Make supervision of the LC my priority. (+)
Total number of (+): 3/4 = 75 %	
Total number of (-): 1/4 = 25%	

Competency 8. Efficiently and Effectively Manage the Financial, Material, and Temporal Resources of the LC.

This competency houses three sub-skills.

Sub-Skill 8.2. Provide Material Resources to the Members of the LC. The LCLs used this sub-skill to address and overcome challenges within the group:

We have to equip our school in the basic required materials, for example, textbooks for both the teachers and the students. There are none. We can't move forward [...]. Schools are asked to 'do what they can'. How can we do this? The funding is just not there for our schools. We want to better equip the school, but we lack the proper funding... (LCL)

Sub-Skill 8.3. Arrange the Teachers' Schedule to Allow Them to Attend the LC Meetings. The LC leaders deployed this sub-skill by expressing their willingness to organize the school schedule to include the activities of the LC:

... to make our learning circle [cellule de base] more efficient, we think that next year, we are going to look at rearranging the calendar to include the LC meetings in the work schedule to encourage the involvement of all of our teachers. (LCL)

Sub-Skill 8.4. Make LC Supervision My Priority. The LC leaders used this sub-skill when relating the difficulties faced in their supervision practices:

In our work as supervisors, we've always noticed the problems related to complementarity, to teamwork. Working as a team, it trains, it can be learned. Confidence in others, their appreciation, the patience required to actively listen to someone who is less experienced... We realize that the more experienced individuals are the ones doing all the talking; they listen very little to what emerges. In the end, only the ideas of the experienced ones are retained. Even if these ideas are good or better, the others can always teach us new things. (LCL)

The presented results reveal several gaps between the sub-skills identified in our study group and those listed in the competency profile of Bouchamma et al. (2020), which served as a reference standard in the present research. The unidentified competencies are highlighted in the following discussion. Professional learning circle leaders must develop and expand these competencies to improve the effectiveness when supervising secondary teachers' collaborative activities.

## 6. Discussion and Conclusion

The goals of the present study were twofold: (1) identify the competencies deployed by leaders of pedagogical learning circles (*cellule de base*) to supervise teacher collaboration activities, and (2) determine which competencies should be acquired or developed to enhance teacher interest and participation in activities involving collective supervision.

The first goal translated to drawing a parallel between the professional skills listed in the principals' competency profile of Bouchamma et al. (2020) and the competencies and sub-skills revealed in the analysis of our study's corpus. Our findings show that the learning circle leaders exercised certain specific competencies in their teacher supervision practices without explicitly naming them.

Table 6 summarizes the overall results of each domain: out of 55 identified sub-skills, 29 were used by participants, for a total of 53 %. In Domain 1, 16 sub-skills were employed and in Domain 2, 10 sub-skills were used, while in Domain 3, no sub-skills were present, and in Domain 4, three sub-skills were evidenced.

Table 6. Summary of the results of each domain

	Number of Competencies and Sub-Skills	
	Competency Profile	Corpus Results
Domain 1	3 (28)	3 (16)
Domain 2	3 (18)	3 (10)
Domain 3	1 (5)	0 (0)
Domain 4	1 (4)	1 (3)
<b>Total</b>	<b>8 (55)</b>	<b>7 (29)</b>

The second objective of this research was to determine the competencies which learning circle leaders must adopt or further develop to improve their supervision practices with regard to teacher collaboration activities. Table 7 summarizes the absent sub-skills in each domain.

Table 7. Summary of the absent sub-skills in our corpus

DOMAIN 1. HUMAN RESOURCES MANAGEMENT			
	Competency 1. Manage the human aspects of the LC throughout its evolution.	Competency 2. Ensure the competent action and professional growth of the LC members.	Competency 3. Ensure my own professional growth and development.
Sub-skills	1.2, 1.7, 1.11, 1.13, 1.16, 1.17	2.2, 2.6	3.1, 3.3, 3.4, 3.5
DOMAIN 2. PEDAGOGICAL MANAGEMENT			
	Competency 4. Create a LC focusing on the students' educational needs and achievement.	Competency 5. Guide the LC members to learn and use teaching practices that best suit the students' needs.	Competency 6. Support the development of collaborations and partnerships devoted to student achievement.
Sub-skills	4.3, 4.4, 4.5, 4.7, 4.8		6.2, 6.3, 6.5
DOMAIN 3. DATA MANAGEMENT			
	Competency 7. Supervise the LC members' analysis of student data.		
Sub-skills	7.1, 7.2, 7.3, 7.4, 7.5		
DOMAIN 4. ADMINISTRATIVE MANAGEMENT			
	Competency 8. Efficiently and effectively manage the financial, material, and temporal resources of the LC.		
Sub-skills	8.1		

In our view, these absent competencies represent skills which the learning circle leaders must acquire to supervise teacher collaboration activities more effectively, with clarity and purpose.

Regarding competency 1 in the first domain (Human Resources Management), the LC leaders must, for example, disseminate the pedagogical unit's findings with the other members of the LC and the district. Sub-skill 1.17 indeed falls under the sharing of winning practices within the LC (April & Bouchamma, 2017). Referring to competency 2 of this same domain (2.2), the LC facilitators must bring the members to use relevant research data to ultimately gain the maturity for self-supervision and professional autonomy (Kalule & Bouchamma, 2014). In competency 3, the LC leaders must know and understand the basic principles of the LC (3.4), which as a group supervision model has certain specific requirements, as do the inception and implementation of any professional learning community (Bouchamma, April & Basque, 2018). In this group dynamic, the supervisors must know different the ways to organize teacher collaboration activities, in addition to understanding the LC's stage of development and the factors influencing or hindering this development (Chen & Mitchell, 2015; Cranston, 2011).

The second domain (Pedagogical Management) serves to help the principal establish a platform of solid educational practices in which the members can engage in meaningful discussions regarding their professional development (Bouchamma et al., 2020). It is in this interesting perspective that LC facilitators can, for example, develop fruitful partnerships with various actors both in the community and in other schools (6.5), and make their vision of the LC and their educational orientations and values known (4.4).

In this discussion, we focus specifically on the third domain, namely, Data Management. As shown in Table 7, we found no sub-skill related to this domain in our study corpus, despite the fact that several studies have clearly identified student data management as the primary activity of teacher collaboration activities (Bouchamma et al., 2020; Prud'Homme & Leclerc, 2014) and affirm that using student data not only adds to the professional growth of teachers and enhances teaching and learning (Bernhardt, 2018), but also ensures the success and monitoring of each student in the school (Prud'Homme & Leclerc, 2014).

Concerning the fourth domain (Administration Management), effective leaders are those capable of managing the financial, material, and temporal resources required for the LC to run smoothly (Bouchamma et al., 2020). Financially supporting the projects and training needs of the LC members is therefore important (8.1).

While not entirely affirming that these supervisors do not possess these unnamed capabilities, we found no indications in the interview data proving that they actually used these skills in their professional practice. Other data collection methods, such as in-class observations or questionnaires would no doubt have produced different results.

### 7. Perspectives and Limitations of this Study

Regarding avenues for further research, it would be of interest to undertake a study in the form of an action research training initiative to enable those individuals supervising teacher professional growth communities such as the *cellule de base* to identify, through their respective practices, the competencies they use and the degree to which these competencies are mastered. Such a study would provide opportunities for reflection on these skills as well as for actions to identify improvement strategies to ensure effective supervision of teacher collaboration efforts.

Although we were able to identify the missing competencies in the analyzed interviews with the LC and unit supervisors, it must be noted that our findings cannot be generalized because the study only presents data from three educational jurisdictions involving catholic and government-run institutions and does not include private schools or those of other religious denominations.

### References

- April, D., & Bouchamma, Y. (2017). Pratiques gagnantes de directions d'établissement scolaire pour surmonter les obstacles rencontrés en supervision pédagogique [Principals' winning practices for effective teacher supervision]. *Revue des sciences de l'éducation*, 43(2), 54-83.
- Bernhardt, V. L. (2018). *Data analysis for continuous school improvement*. 4th ed. Routledge.
- Bouchamma, Y., April, D., & Basque, M. (2018). How to establish and develop communities of practice to better collaborate. *Canadian Journal of Educational Administration and Policy*, 187, 91-105.
- Bouchamma, Y., Basque, M., Giguère, M., & April, D. (2020). *Professional learning communities: Competency standards for school principals*. Les Presses de l'Université Laval.
- Bouchamma, Y., Giguère, M., & April, D. (2019). *Pedagogical supervision: A competency standards framework*. Rowman & Littlefield.
- Bouchamma, Y., Savoie, A., & Basque, M. (2012). The impact of teacher collaboration on school management in Canada. *US-China Education Review*, (B5) 485-498.
- Chen, Y., & Mitchell, C. (2015). Interactions between professional learning communities and the educational culture where they are employed: Comparative research across Beijing and Ontario schools. *International Studies in Educational Administration*, 43(2), 39-52.
- Cranston, J. (2011). Relational trust: The glue that binds a professional learning community. *Alberta Journal of Educational Research*, 57(1), 59-72.
- Fortin, M. F., & Gagnon, J. (2016). *Fondements et étapes du processus de recherche. Méthodes quantitatives et qualitatives* [The fundamentals of research: Quantitative and qualitative methods]. Chenelière éducation.
- Inspection générale (2010). *La cellule de base de la formation et de l'encadrement. Module de formation destiné aux chefs d'établissements secondaires et aux conseillers d'enseignement* [Learning circle for training and supervision. Training module for principals in secondary education and education consultants]. Retrieved from <https://docplayer.fr/39185947-La-cellule-de-base-de-la-formation-et-de-l-encadrement.html>
- Jacquet, M., & Dagenais, D. (2010). Perspective croisée sur la collaboration professionnelle des enseignants dans trois contextes scolaires en Colombie-Britannique [Cross-perspective of teacher professional collaboration in three contexts in British Columbia, Canada]. *McGill Journal of Education*, 45(3), 511-534. <https://doi.org/10.7202/1003575ar>
- Kalule, L., & Bouchamma, Y. (2014). Teacher supervision practices and characteristics of in-school supervisors in Uganda. *Educational Assessment, Evaluation and Accountability*, 26(1), 51-72. <https://doi:10.1007/s11092-013-9181-y>
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology* (4th ed.). Sage Publications. <https://doi.org/10.4135/9781071878781>
- Le Boterf, G. (2006). *Construire les compétences individuelles et collectives: Agir et réussir avec compétence* (4e éd.). Éditions d'Organisation.

- Leclerc, M. (2012). *Communauté d'apprentissage professionnelle. Guide à l'intention des leaders scolaires* [Professional learning community. A guide for school leaders]. Les Presses de l'Université du Québec.
- Lupungana, M. P. (2010). *Séminaire de formation des chefs d'établissement sur la pratique de l'enseignement à l'école secondaire: visite de classe, contrôle des documents pédagogiques et cellule pédagogique de base de formation et d'encadrement* [Training seminar for principals on teaching in secondary school: Class visit, teaching documentation, and pedagogical training and supervision circle]. Unpublished article.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis. A methods sourcebook* (3rd ed.). Sage.
- Ministère de l'Éducation, du Loisir et du Sport (MELS). (2008). *La formation à la gestion d'un établissement d'enseignement. Les orientations et les compétences professionnelles* [School management training. Orientations and professional competencies]. Ministère de l'Éducation, du Loisir et du Sport.
- Ministère de l'Enseignement Primaire, Secondaire et Technique, Ministère de l'Enseignement Supérieur et Ministère des affaires sociales (2015). *Stratégie sectorielle de l'éducation et de la formation 2016-2025*. Retrieved from [https://www.google.com/search?q=Strat%C3%A9gie+sectorielle+de+l%E2%80%99+99%C3%+et+de+la+formation+2016-2025&rlz=1C1CHBF\\_fr+CA882CA882&oq=Strat](https://www.google.com/search?q=Strat%C3%A9gie+sectorielle+de+l%E2%80%99+99%C3%+et+de+la+formation+2016-2025&rlz=1C1CHBF_fr+CA882CA882&oq=Strat)
- Nolan, J. F., & Hoover, L. A. (2008). *Teacher supervision and evaluation: Theory into practice* (2nd ed.). Wiley.
- Organisation de coopération et de développement économiques (2020). *Guide TALIS 2018 à l'intention des enseignants* (vol. II) [TALIS 2018 Guide for teachers, Vol. 2]. Éditions OCDE.
- Prud'Homme, R., & Leclerc, M. (2014). *Données d'observation et gestion de l'apprentissage: guide à l'intention des communautés d'apprentissage professionnelles* [Observation data and learning management: A guide for professional learning communities]. Les Presses de l'Université du Québec.
- Romero, M., Lille, B., & Patino, A. (2017). *Usages créatifs du numérique pour l'apprentissage au XXIe siècle* [Creative ways of using numerics for learning in the 21st century]. Les Presses de l'Université du Québec. <https://doi.org/10.2307/j.ctt1vw0rkx>
- Snyder, J., & Bae, S. (2017). *Teachers' time: Collaborating for learning, teaching, and leading*. Stanford Center for Opportunity Policy in Education. Retrieved from <https://edpolicy.stanford.edu/library/publications/TeacherTime>
- Tardif, M., & Lessard, C. (1999). *Le travail enseignant au quotidien. Contributions à l'étude du travail dans les métiers et les professions d'interactions humaines* [What teachers do every day. Contributions to the study of trades and professions involving human interactions]. Les Presses de l'Université Laval.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511803932>

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).