

Workshop in Sustainable Development Practice 2022-23

“Programmatic Design of Activities to Support School Principals in Leadership, School Management and Community Engagement in Guatemala”

Client organization: Pencils of Promise

FINAL REPORT

DELIVERABLE 3: RECOMMENDATIONS ON TOPIC PRIORITIZATION AND TRAINING IMPLEMENTATION FOR SCHOOL PRINCIPALS ON THE AREAS OF LEADERSHIP, SCHOOL MANAGEMENT, AND COMMUNITY ENGAGEMENT

ANNEX: DELIVERABLE 2: CONCEPTUAL MAPPING OF THE IMPORTANCE OF LEADERSHIP, MANAGEMENT, AND COMMUNITY ENGAGEMENT SKILLS IN ACHIEVING BETTER SCHOOL AND STUDENT OUTCOMES

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I. INTRODUCTION

The Workshop in Sustainable Development (hereinafter referred to as “the Project”) conducted for Pencils of Promise (PoP) aims at providing recommendations to inform the design of trainings on the topics of leadership, school management, and community engagement for school principals in rural communities of Guatemala. In addition to the Project workplan presented in late December of 2022 and the “*Conceptual mapping of the importance of leadership, management, and community engagement skills in achieving better school and student outcomes*” (hereinafter referred to as “Deliverable 2”), presented in early March of 2023 and included here as an annex for the reader’s reference, **this report is the third and final deliverable of the Project.**

I.1. Scope and structure of this deliverable

Building upon the main findings of Deliverable 2, which identified a positive relation between school principals’ skills in leadership, management, and community engagement with school and student outcomes, this deliverable offers specific recommendations in relation to PoP’s training efforts with school principals in the aforementioned skills. **In particular, this document presents contextualized recommendations on specific topics for PoP to prioritize in their training efforts, as well as recommendations on specific tools and strategies to implement within prioritized topics.** In other words, this deliverable provides PoP with concrete recommendations on “what” to train principals on and “how” to train them.

Additionally, **this deliverable presents a section that aims to account for issues and limitations at three levels.** First, systemic issues that are outside PoP’s manageable control but may affect the extent to which principals’ training can impact student and school outcomes. Second, areas for improvement within PoP’s manageable control that, when addressed, may positively contribute to achieving better outcomes. Third, methodological issues and limitations that the SIPA team faced while conducting its work during the course of the Project.

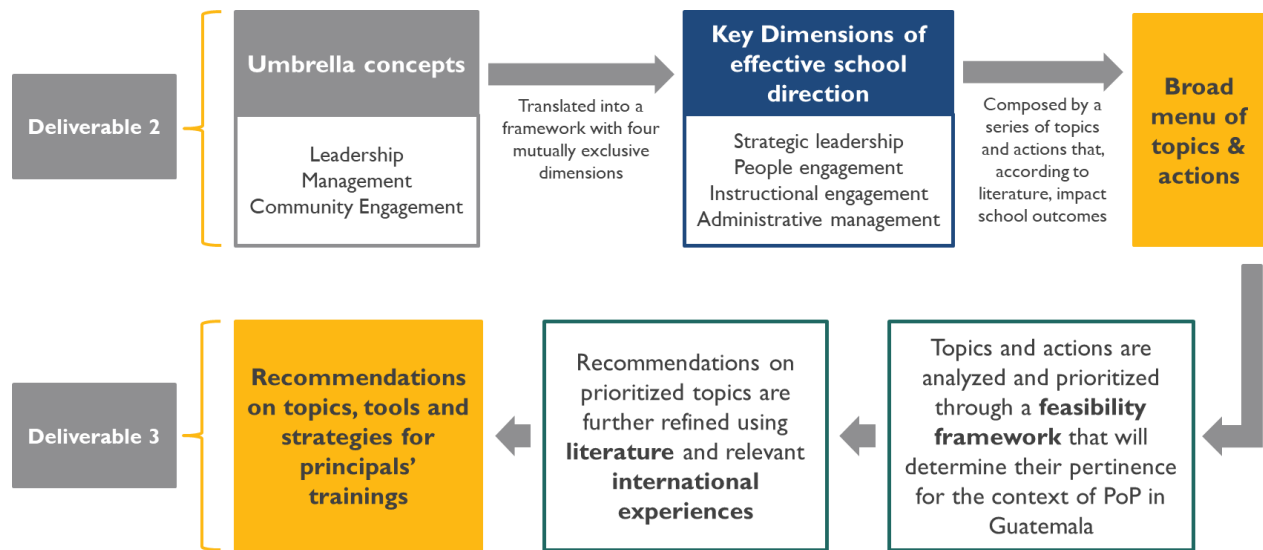
Considering the above, this document, alongside with the previous deliverable, aims to serve as a valuable input for PoP to guide their principals’ training design work. The Project does so in four ways:

1. By establishing a clear relation between principals’ effective direction and school outcomes
2. By providing contextualized recommendations on which topics are more likely to yield the best results
3. By recommending specific actions and strategies for trainings on the prioritized topics
4. By acknowledging the limitations identified at various levels of the Project’s implementation

The remaining of this document is structured as follows. Section 2 presents the framework, information gathering process, and assessment conducted to arrive at a short list of topics to prioritize for principals’ trainings. Section 3 elaborates on the recommendations of section 2 and the findings of Deliverable 2 to provide a menu of tools and strategies for each of the prioritized topics; this section also brings in international experiences on principals’ trainings to provide general guidelines for training implementation. Section 4 presents the limitations identified throughout the Project. Section 5 concludes by presenting potential avenues for future work.

The diagram below visualizes the scope of this deliverable and the way it fits into the work conducted in previous stages/deliverables of the Project.

Diagram 1. Overview of the Project's methodological approach



1.2. Overview of the main recommendations

The five prioritized topics within the broad fields of strategic leadership, people engagement, instructional engagement, and administrative management that the SIPA team recommends be prioritized are:

- Effective communication with teachers, staff, parents, and community
- Professional development plans for teachers and staff
- Building of relationships based on trust and cooperation
- Availability of the principal and optimization of time
- Effective feedback to teachers and staff

The six main strategies and tools to conduct trainings on the prioritized topics include:

- Eisenhower matrix for task prioritization
- Cluster groups and meetings (between PoP and principals) for joint identification of issues, brainstorming of potential solutions, and individual implementation, documentation, and reflection
- Professional development grids for a clear mapping of a teacher's individual development goals, specific activities and requirements to achieve the development goal, assessment sources, and timelines
- Master schedules for setting aside time blocks for professional development and individualized time to build relationships with teachers and student
- "Cafecito con Panito" Discussion: Contextualized activity in which principals meet with teachers, parents, and even community members, to provide exclusively positive feedback regarding their efforts and contributions to the school
- "1-1-5 meetings": Short activity (5 minutes approximately) in which principals meet with teachers on a 1-1 basis and are encouraged to create personal connections. Principals are encouraged to let the conversation flow freely but have some talking points if needed.

2. RECOMMENDATIONS ON TOPIC PRIORITIZATION FOR PRINCIPALS' TRAININGS

This section elaborates on the SIPA team's recommendations regarding the specific topics and actions that could be prioritized by PoP for the principals' trainings. The section provides a description of the initial menu of topics and actions that stem from the work done in Deliverable 2 and presents the framework used by the SIPA team to assess the suitability of topics and rank them for recommendation purposes. Subsequently, this section elaborates on the main findings of the information gathering process conducted during the March trip to Guatemala, and uses these findings to inform the framework assessment and the final recommendations presented at the end of the section.

2.1. Overview of the methodological approach

The main goal of this exercise is to arrive at a short list of topics and actions to be prioritized by PoP for training purposes with school principals. To this end, the SIPA team used three main inputs. Firstly, a broad menu of specific topics and actions within the dimensions of effective school direction (i.e., strategic leadership, people engagement, instructional engagement, and administrative management) that stem directly from the work conducted in Deliverable 2. Secondly, the framework to assess the suitability of topics and actions in the context in which PoP operates in Guatemala, further detailed below. Thirdly, the information gathered during the SIPA team's second visit to Guatemala in March of 2023 through in-school observation, surveys and interviews conducted to principals, teachers, and supervisors (elements from interviews conducted during the first visit are also used to qualify some assessments).

These three inputs are interconnected in the methodological approach. From the broad menu of 14 topics and actions identified using the work conducted in Deliverable 2, the SIPA team created a framework with four criteria to rank the topics and identify the most suitable. The information gathered during the March trip provides the necessary contextual data to inform the assessment of each of the 14 topics and actions according to the established criteria.

When assessed through the framework, each of the 14 topics and actions was given a score according to how it performed against the established criteria. **The five topics and actions with the highest overall score, according to the framework, are those the SIPA team recommends PoP to prioritize for the principals' trainings.**

2.2. Initial menu of topics

The work conducted by the SIPA team as part of deliverable 2 used the umbrella concepts of leadership, school management, and community engagement to come up with a list of mutually exclusive dimension of effective school direction i.e., strategic leadership, people engagement, instructional engagement, and administrative management. From these four dimensions, the existing literature provides a broader menu of topics and actions, all of which appear to have a relation with improved school and student outcomes.

However, as literature also suggests, not all topics and actions are equally suitable for every single context. Moreover, in contexts of limited time and financial resources, prioritization becomes necessary as it is challenging to work on multiple issues at a time. This is precisely what this section of the deliverable aims at doing. To that end, the table below presents a list of 14 topics and actions identified in the existing literature that are later assessed individually for prioritization purposes.

Table 1. Broad menu of topics and actions in the four dimensions of effective school direction

Dimension	Topics & Actions
Strategic leadership	Definition of mission, vision and institutional values
	Resolution of conflicts and contingencies
People engagement	Effective communication with teachers, staff, parents, and community
	Effective feedback to teachers and staff
	Professional development plans for teachers and staff
	Building of relationships based on trust and cooperation
	Availability of the principal and optimization of time
Instructional engagement	Monitoring and evaluation of educational results
	Development of curricula with a focus on relevance and context
	Dissemination processes of best teaching practices
	Participation in teacher training
Administrative management	School financial management
	Management of non-financial resources of the school
	Administrative management of the school's human resources ¹

2.3. Framework to assess the suitability of topics

The framework presented in this subsection contains four criteria against which each of the 14 topics and actions presented above are assessed and prioritized. This subsection describes each criterion, presents the information sources used to inform the assessment for each criterion, and provides a brief justification on the decision to assign differentiated weights to the four criteria.

2.3.1. Description of each criterion

The four criteria of the SIPA team’s framework are described below.

Principals’ receptiveness: This criterion refers to how willing are school principals to be trained in a specific topic or action. This criterion considers key aspects such as the importance that principals assign to the specific topic or action and their intellectual curiosity towards them. Topics or actions for which principals’ receptiveness is high will score higher on this criterion.

Potential for impact: This criterion refers to the potential of each topic or action to yield positive impacts on school and student outcomes. On the one hand, it considers how teachers perceive each topic or action to be important in terms of the impact that said topics or actions have on facilitating their job. According to the literature, one of the main avenues through which principals impact school and student outcomes is teachers, as teachers are the professionals who have the most contact with students (Gois,

¹ Not to be confused with topics within the “people engagement” dimension. Human resources refer exclusively to administrative tasks such as payroll, filing contracts, or updating documents and staff records.

2020). Therefore, topics and actions that facilitate and enhance teachers' work are more likely to generate positive impacts. On the other hand, the criterion considers the current self-reported level of proficiency of principals in each topic or action, as well as current performance on certain areas according to the observational work detailed further below. Topics or actions for which impact potential is high will score higher on this criterion.

Sustainability of impact: This criterion refers to how likely is it that learning in each topic or area will be applied by the principal on a frequent and long-term basis in their school direction work. Sustainability is important as it will guarantee a long-term application, as opposed to short-lived changes in the way in which school direction work occurs at the schools. Topics or actions for which sustainability of impact is high will score higher on this criterion.

Authorities' buy-in: This criterion considers the perceptions of school supervisors regarding the importance of working in each of the key dimensions of effective school direction. Considering that PoP is required to validate and seek approval from education authorities for all their trainings, internalizing their opinions is key to guarantee an actual implementation of the trainings in the prioritized topics. Topics or actions for which authorities buy-in is high will score higher on this criterion.

A note on time requirements: The SIPA team is unable to establish, ex-ante, the specific time requirements for trainings in each of the topics or activities. Therefore, this aspect was not included as a criterion in the framework. Moreover, the SIPA team believes that topic prioritization should, ideally, not be bounded by time as long as the topics prove to yield positive results. However, acknowledging that time constraints for training implementation is an issue faced by PoP in Guatemala, the SIPA team encourages PoP to consider this aspect when making decisions regarding potential future trainings.

2.3.2. Overview of information sources for each criterion

This subsection briefly describes the sources used to inform each of the four criteria presented above. Further ahead in the document, subsection 2.4 presents a detailed review of the data collection instruments used and the main findings and insights identified with them

Principals' receptiveness: The main source of information for this criterion are the surveys and interviews conducted to school principals during the SIPA team's second visit. In particular, this criterion is informed by questions regarding principals' perception of importance regarding dimensions and topics, as well as their intellectual curiosity on each topic.

Potential for impact: For this criterion, the first and foremost, though implicit, source of information was the literature review conducted in Deliverable 2. All of the 14 topics and actions identified have, according to existing literature, the potential to impact school and student outcomes. That said, this criterion uses surveys and interviews conducted to both teachers and principals during the SIPA team's second visit (as noted above, elements from interviews conducted during the first visit are also used to qualify some assessments). In particular, this criterion is informed by questions regarding how teachers perceive topics' importance to properly conduct and facilitate their work (as well as principals' understanding of teachers' perception), and questions regarding principals' self-reported proficiency on each topic and action. Finally, this criterion is also informed by the observational exercise conducted during the second visit.

Sustainability of impact: For this criterion, the main source of information are the surveys conducted to both principals and teachers during the SIPA team’s second visit. In particular, this criterion is informed by questions regarding the likelihood that principals will apply learnings on a frequent and long-term basis in their school direction work.

Authorities buy-in: This criterion is informed specifically by questions directed during interviews and surveys to school supervisors regarding their perception about the relative importance of each dimension of effective school direction.

2.3.3. Weighting methodology

Each criterion is equally weighted in the framework. There are two main reasons behind this decision. Firstly, in order for the trainings to have the intended impact, the aspects that each criterion addresses are fundamental. The trainings will likely be ineffective if one of the criteria is not at least partially met. As an example, even if a topic is proven to have buy-in from authorities and is considered relevant by teachers, it will unlikely lead to positive impact if receptiveness from school principals’ receiving the training is low. Conversely, if a topic does not have buy-in from authorities, implementing trainings on said topic might prove difficult in practice.

A second, more technical argument for an equal weighting of criteria, is the fact that in order to produce significantly different results in the framework scoring (i.e., significantly change the average score of a topic by changing the weight of a criterion in the framework), a specific criterion should have a significantly higher weight relative to other criteria. Considering that all four criteria are relevant, as expressed in the previous paragraph, it is not possible to give one criterion alone a weight that is considerably higher than the other criteria.

2.4. Main findings and insights from the information-gathering process

During March of 2023, the SIPA team traveled for a second time to Guatemala. The main purpose of this trip was to collect in-country information to (i) refine the framework criteria presented in section 2.3 and (ii) inform the assessment of each topic using the framework. As explained in section 2.3.2, the surveys, interviews, and observational research conducted during the SIPA team’s second visit have the purpose of informing specific framework criteria. This section, hence, describes the data-collection instruments used and presents the main quantitative and qualitative findings of the process that inform the framework assessment and recommendations presented in the following subsection. The interview and survey samples are included in the annex at the end of this document.

This work is also expected to serve as a tool for PoP to better understand the current state of affairs of matters that pertain to school leadership, management, and community engagement in the context of Guatemala, and, consequently, continue refining their principals’ trainings design after the Project with the SIPA team has concluded. To this end, the SIPA team also recommends taking into consideration the methodological limitations presented in section 4.2 below.

2.4.1. Observational research analysis

During its second visit to Guatemala, the SIPA team conducted five (5) school visits in the departments of Suchitepéquez and Quetzaltenango. Visiting the school helped the SIPA team obtain firsthand knowledge

about the school's physical surroundings, culture, and atmosphere. This involves paying attention to how principals and teachers interact, how teachers respond to students, the quality of classroom resources, and general cleanliness. Each school is unique, with its difficulties, strengths, and weaknesses. The SIPA team can fully grasp the unique context in which the school functions by visiting the school and seeing its operation. Knowing the school environment is critical for providing meaningful and practical recommendations for the school's situation, eventually benefiting the students and the entire school community.

Another critical aspect of school visits is making comparisons among schools. Comparing schools can reveal helpful information that can be used to drive school management suggestions. It is possible to identify outstanding practices that contribute to success by comparing the performance of different schools. Comparing schools can also help develop performance benchmarks. Identifying high-performing schools makes it possible to establish benchmarks for other schools to aspire to.

Considering the limitations of the observational exercise (see section 4.3), the work focused on four observable categories:

- Mission, vision, and values. Understanding the school's purpose, goals, and values is included in this category
- Principal and teacher Interaction, which involves the interaction and communication between the school principal and the teachers
- Teacher and student interaction category, which pertains to the interaction and communication between teachers and students
- Physical Infrastructure, which includes the state of the school's buildings and classrooms

Each category adds to a school's overall efficacy and helps create a healthy learning environment for students. The team found areas of improvement and strengths that may be reproduced in other schools by looking at these categories.

***** The general suggestions made in this section ARE NOT the main recommendations of this deliverable. However, as explained further below, they might constitute complementary activities or low hanging fruits that may be easily implemented, yet never at the expense of the prioritized topics, strategies and tools presented in sections 2 and 3. *****

2.4.1.1. Mission, Vision, and Value

Mission, vision, and values are core to any organization as they set the purpose and the principles that ought to guide all organizational decisions (Coleman, 2013). In general terms, the mission answers the questions of what the organization does, for whom it does it, and what it aims to accomplish for those who receive the service or product. In a similar tone to the mission but going one step beyond, the vision answers the questions of what success look like for the organization and how the world would be different if that success is achieved. This, in turn, speaks about what makes the organization unique (Bagley, 2022). Values articulate the behavioral guidelines and mindsets needed to achieve the vision and become the lens through which all company actions happen (Lencioni, 2002; Coleman, 2013). By creating a meaningful school mission, vision, and values, school principals can help to promote a positive school culture that supports student success.

Key observations

The SIPA Team observed that only one of the five schools had a visible display of their school values shown as words on paper sticking on their classroom walls. All of the schools were missing school missions and visions statements openly displayed at the school.

Implication

Based on the observations, there are opportunities for improvement in promoting missions, visions, and values in all schools. These include creating and displaying a shared set of school missions, visions, and values in schools; and educating teachers and students on the importance of school missions, visions, and values, by constantly and permanently remember all in the school community about them.

The displays of school missions, visions, and values could be shown prominently in classrooms and other areas of the school to remind everyone in the school community of the importance of upholding these missions, visions, and values. Principals leading the creation and promotion of shared school missions, visions, and values may help to build a positive school culture where students, teachers, and staff feel a sense of belonging and purpose. When students are reminded of the school's shared missions, visions, and values, they are also more likely to act in accordance with them. Moreover, involving teachers, students, and community members in creating and promoting school missions, visions, and values with the school principal may help build a sense of community and shared purpose. This may lead to increased involvement and support from the broader community, contributing to long-term sustainable results and reflecting a higher likelihood of teachers and community buy-in.

The school principal could also provide training and resources for teachers and students on the importance of school missions, visions, and values and how to promote a positive school culture. By doing so, teachers and students involved in the training with their principal create a shared understanding of expectations and goals. When students understand and connect with the values of their school, they may feel more motivated to participate in school activities, engage in their learning, and take ownership of their education, leading to better outcomes. Teachers can also strengthen their relationships with students by participating in the training. This could contribute to teacher and community buy-in and have a high potential for impact.

2.4.1.2. Principal and Teacher Interaction

Principal and Teacher interaction refers to the communication and relationship building between the school principal and the teachers. It is important because it can create a positive and supportive work environment for teachers, translating into better instruction and student outcomes.

Key observations

In general, the SIPA Team observed that teachers did not give their full attention to the school principals during meetings or discussions. Many teachers were observed using their phones or engaging in other activities while the principal spoke. However, there was a noticeable difference in how the principal interacted with the teachers in one school. The principal's authority was clearly established and respected, as the teachers were attentive and followed the principal's lead during meetings and discussions. The teachers displayed good order and discipline.

Implications

Based on the observations, some areas of improvement and strengths could be replicated in other schools.

Areas of improvement:

- Encouraging teachers to actively listen and engage during meetings or discussions with the school principal
- Setting clear expectations and guidelines for appropriate behavior during meetings or discussions with the school principal
- Providing professional development opportunities for teachers on effective communication and active listening skills (see section 3)

Strengths to replicate (see section 3):

- Encouraging open and effective communication between the school principal and teachers
- Fostering a positive and collaborative relationship between the school principal and teachers based on mutual respect and trust to promote a culture of respect and discipline among teachers

Positive and collaborative school culture may impact student outcomes, including improved academic performance and greater student engagement. When teachers and school principals work together effectively, students are more likely to feel supported and motivated to succeed.

2.4.1.3. Teacher and Student Interaction

Teacher and student interaction refers to the communication, engagement, and relationship between teachers and students in a school setting. It is important for the Project because it significantly impacts student learning outcomes, academic achievement, and overall well-being. Positive teacher-student interactions can promote a supportive learning environment, foster engagement and motivation, and improve student attitudes toward learning. Effective teacher-student interactions can also help build trust, respect, and rapport between teachers and students, improving classroom behavior and academic performance (Rimm & Sandilos, 2010). The SIPA team had the opportunity to observe student-teacher interactions in two schools.

Key observations

In one school, it was noticed that the teachers displayed impatience toward the students and used their fingers to point out mistakes or areas of improvement on student assignments with an angry face. In contrast, the team observed a teacher in another school who continued working on a student's assignment after the end-of-class bell had rung. The student patiently waited beside the teacher to be released without showing frustration or impatience.

In one school, the teachers cleaned the classroom alongside their students. However, in the other school observed, there was no similar action observed.

In one school, the students were easily distracted when PoP and the SIPA team arrived in the school. Instead of listening to their teacher and working on their assigned work, the students ran around and played during class. In the other school, the students were observed throughout the visit to be well-behaved and stayed in their classrooms to finish their work.

Implications

Encouraging teachers to communicate effectively and patiently with their students, rather than displaying impatience or anger when pointing out mistakes or improvement areas, can help build stronger relationships based on trust and respect. Encouraging teachers to communicate effectively and patiently with their students can also help reduce disruptive classroom behavior. This can increase student engagement, better classroom behavior, and improve academic outcomes (Rimm & Sandilos, 2010). Setting clear expectations for behavior and encouraging teachers to engage in classroom cleaning alongside their students can promote a sense of responsibility and community within the classroom. This can create a more positive and supportive learning environment for students, leading to improved academic performance and well-being (Ibid.).

2.4.1.4. Physical Infrastructure

Physical infrastructure refers to the tangible, visible elements that could be felt that make up the built environment of a school, including buildings, classrooms, furniture, equipment, and other natural factors. Physical infrastructure is important, according to Barrett et al., (2019), as it leads to a better overall learning environment and could lead to better student outcomes.

Key observations

- In general, schools have poor window conditions and no curtains in their classrooms. However, a particular school stands out for having curtains installed for all of the windows in their classrooms.
- In general, student tables were unlabeled, with no names or identification assigned to them. However, in one particular school, there was a noticeable difference in that each student's table had a name label assigned to them.
- While all schools had trash bins, they generally were not regularly emptied with overflowing bins with accumulated waste. In contrast, one particular school stood out for its cleanliness, as its trash bins were observed to be emptied at the end of each school day, leaving the bins empty before school close for that day.
- Schools generally had solid roofs made of concrete or other solid materials. However, one school had a distinctive feature: its roof was covered in tiles and had a gap between them.
- In general, schools do not have hand soaps near the hand wash station. However, one school differed from the norm by readily offering hand soap beside their hand wash station.
- In general, the classrooms had accumulated clutter, with books, papers, and other items scattered throughout the room. However, one school was exceptional in having well-organized classrooms, with books, hygiene items, and other tools neatly arranged and easily accessible.
- In general, schools have lights in their classrooms, but some classrooms in a few schools have broken lightbulbs.

Implication

Based on the observations, there are some ways school principals could improve their schools and link these improvements to the potential impact on student outcomes. First, principals could prioritize improving the physical conditions of schools, including repairing windows, providing curtains, fixing broken lightbulbs, and organizing classroom spaces and school buildings. These improvements could positively

impact students' learning environments, potentially leading to better engagement and academic performance (Barrett et al., 2019).

Second, Principals could promote regular cleaning of classrooms and facilities, including regular trash disposal and providing hand soap near hand wash stations. These efforts could promote better hygiene and health among students, potentially leading to fewer absences and better overall well-being.

Lastly, principals can lead by example and demonstrate to their teachers and students the importance of maintaining organized classrooms. They can also provide resources and training for teachers on effectively organizing and maintaining their classrooms, including strategies for decluttering, storage solutions, and arranging furniture for maximum accessibility. By prioritizing organization and accessibility, schools can create a more positive and conducive learning environment for students. This can lead to improved academic performance and overall student well-being (Barrett et al., 2019).

2.4.2. Surveys analysis

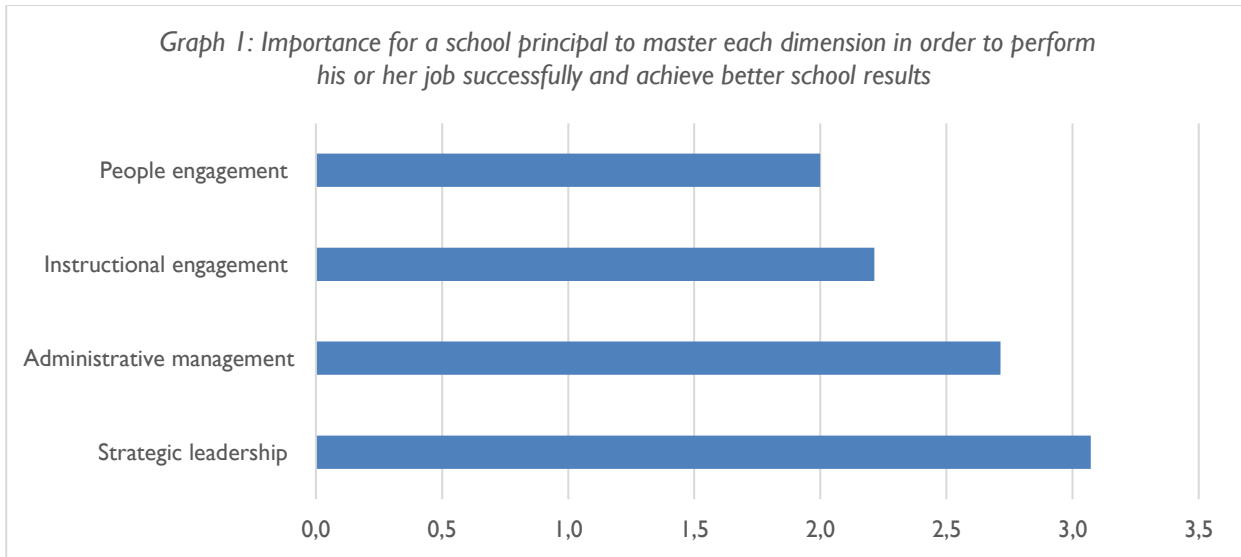
The goal of surveying school principals, supervisors, and teachers is to gauge their thoughts and input on many elements of the school, such as strengths, flaws, problems, and areas for growth. Surveys can give helpful information about leadership, teaching quality, student learning, school culture, and resources. A more thorough and holistic image of the school may be gained by gathering data from numerous stakeholders such as principals, supervisors, and teachers. The survey data can guide school improvement initiatives and generate focused interventions to address identified needs. During the visit, the SIPA team conducted 14 surveys from school principals and 5 surveys from supervisors during the event with the Minister of Education. After the trip, the SIPA team sent an e-survey to school teachers and got 35 responses.

2.4.2.1. Principals' survey

Question 1: Rank the following dimensions in order, depending on how important it is for a school principal to master each dimension to perform his or her job successfully and achieve better school results (1 being the value corresponding to the most crucial area and 4 being the value corresponding to the least important area).

- Strategic Leadership
- People Engagement
- Instructional Engagement
- Administrative Management

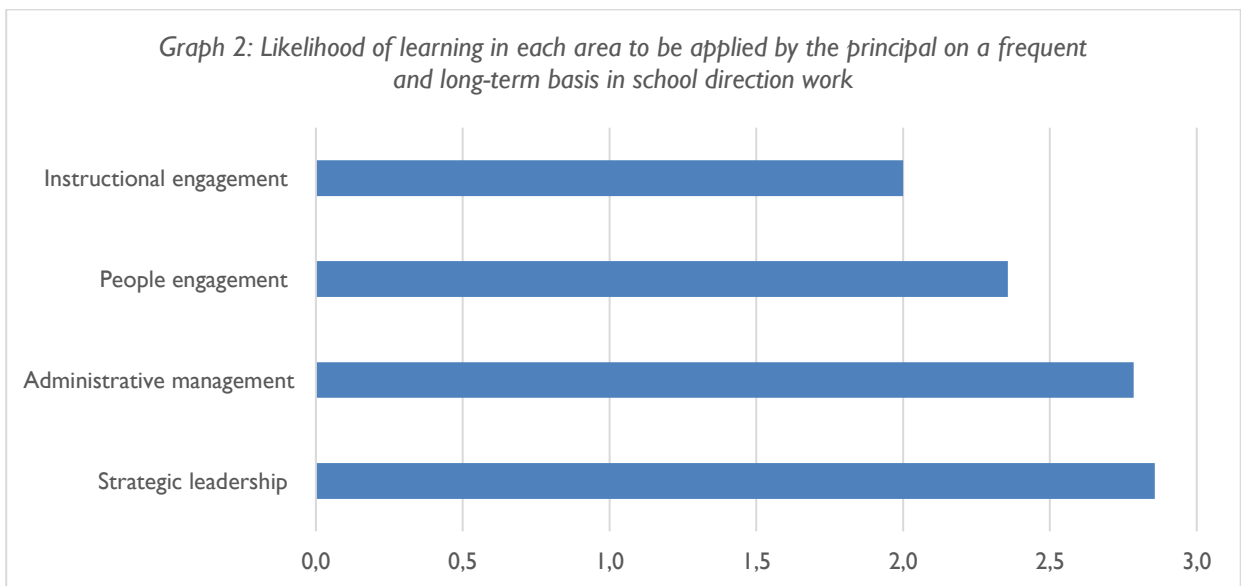
This question informs the principals' receptiveness criterion. According to the ranking, people engagement appears to be the most critical dimension for a school principal to master, followed by instructional engagement, administrative management, and strategic leadership. While administrative management and strategic leadership are still crucial, they are viewed as less significant than the other two categories for improving school performance.



Question 2: Rank the following dimensions in order, depending on how likely it is that learning in each area will be applied by you on a frequent and long-term basis in your school direction work (1 being the value corresponding to the dimension with the highest probability and 4 the area with the lowest probability).

- Strategic Leadership
- People Engagement
- Instructional Engagement
- Administrative Management

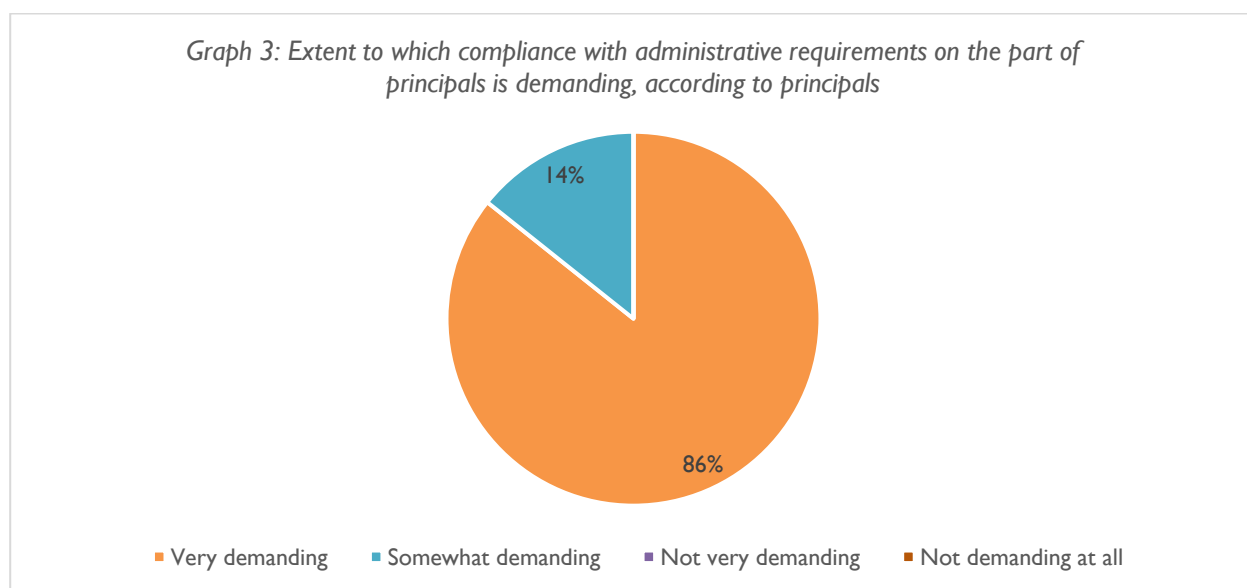
This question informs the sustainability of impact criterion. According to the survey results, instructional engagement appears to be the dimension most highly appreciated by school principals in terms of its potential to be applied in a frequent and long-term basis. Following closely behind instructional engagement is the people engagement dimension. Strategic leadership is scored lowest.



Question 3: *How demanding do you consider the requirements established by the Ministry of Education to be in terms of the time required by principals to achieve compliance?*

- *Very demanding*
- *Somewhat demanding*
- *Not very demanding*
- *Not demanding at all*

This question aims to determine whether the Ministry's requirements are feasible and achievable for principals. All principals chose demanding for this question, implying that principals may have difficulty and potential impediments in complying with these standards. This might signal that more resources, assistance, or a reassessment of the requirements are required to ensure they are realistic and feasible (see section 4.1).

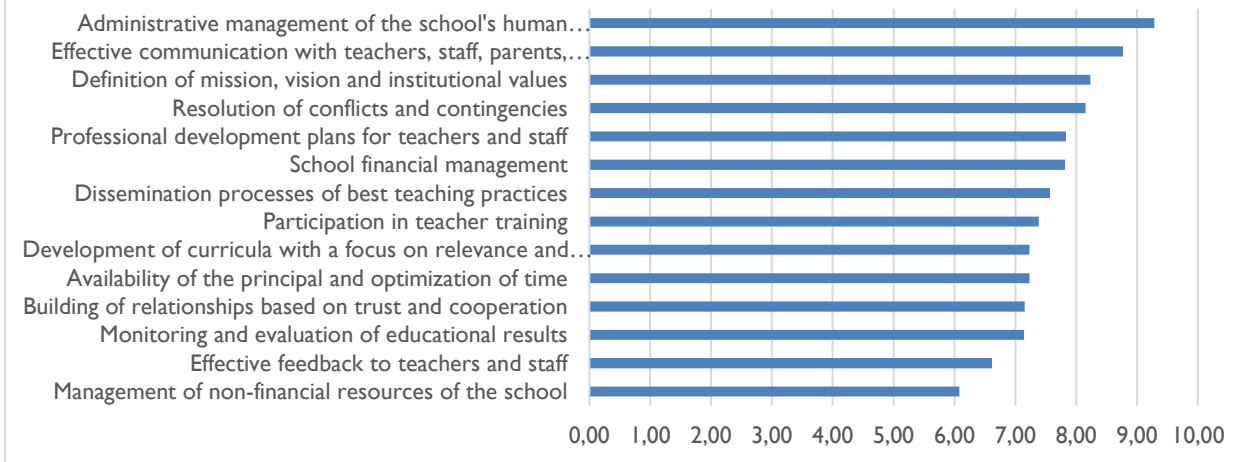


Question 4: *Please rate your interest in learning about the following topics (i.e., 14 topics of Table 1) by assigning a value from 1 to 10, with 10 being the highest level of interest and 1 being the lowest. In assigning each rating, please take into account your intellectual curiosity and how important you think each topic is to the work of school direction.*

This question informs the principals' receptiveness criterion, since it seeks to ascertain their interest in learning about specific topics of school direction. The principals' evaluations will give insight into their readiness to learn new knowledge and abilities to help them perform their job better.

Based on the survey data, principals are most likely to learn administrative management of the school's human resources—yet this result is later qualified and limitations are further explained in section 4.3—followed by effective communication with teachers, staff, parents, and community, and the definition of mission, vision and institutional values. Management of non-financial resources of the school is the topic that principals are least interested in. This information provides valuable insights into the areas where principals are most likely to invest their time and effort to enhance their performance as school leaders.

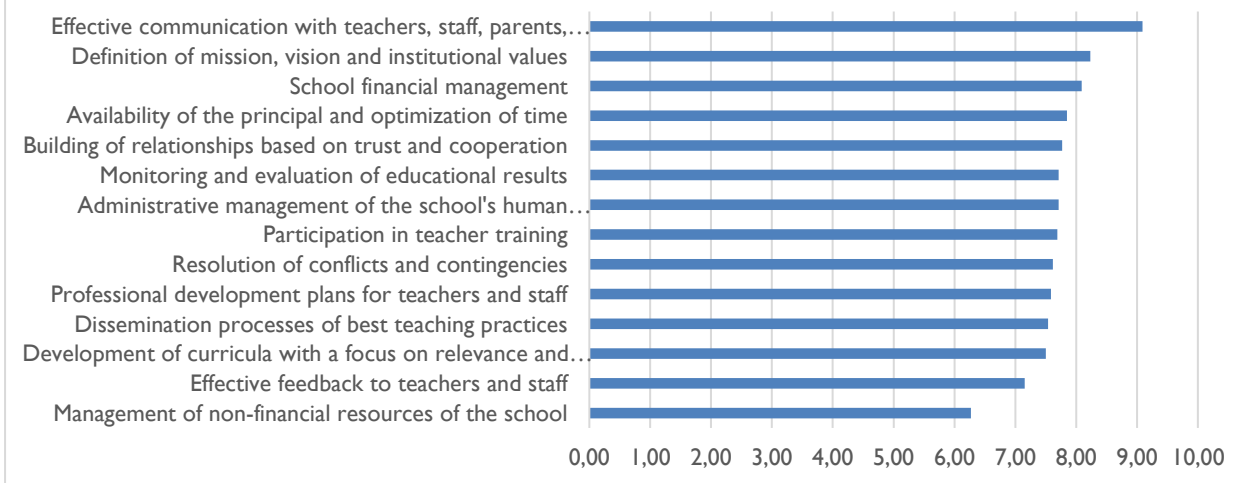
Graph 4: Principals' stated interest per topic



Question 5: Please rate your level of proficiency on the following topics (i.e., 14 topics of Table 1) by assigning a value from 1 to 10, with 10 being the highest level of proficiency and 1 being the lowest. Remember that your response is completely anonymous and will not be used for evaluation purposes at any time.

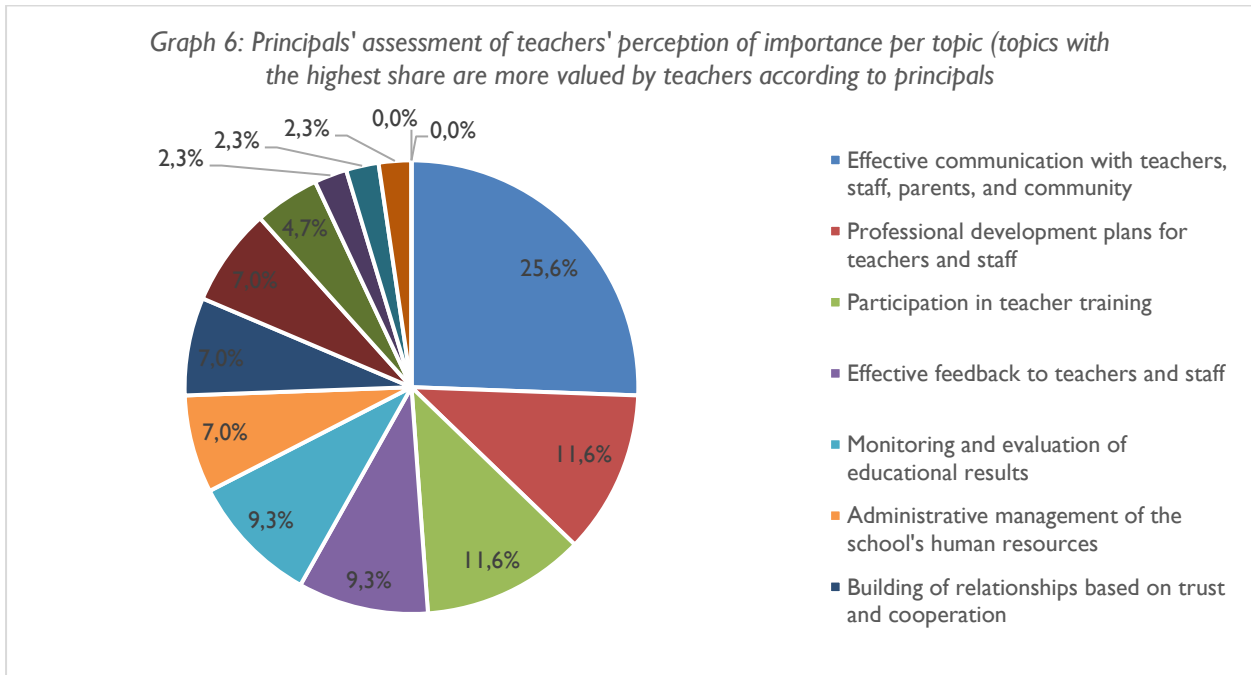
This question informs the potential for impact criterion, as it seeks to assess school leaders' present skill level on various topics. Based on the survey data, principals are most skilled in effective communication with teachers, staff, parents, and the community, followed by the definition of the institutional mission, vision, and values, and school financial management. Principals are least skilled in non-financial resource management of the school.

Graph 5: Self-reported level of principals' proficiency per topic



Question 6: In the options of the previous question (i.e., 14 topics of Table 1), please mark with an asterisk (*) the three (3) topics that, according to you, your teachers would value most in terms of the impact that their prioritization would have in improving and/or facilitating their teaching work.

This question informs the potential for impact criterion, since it seeks to gauge the topics that teachers believe are most helpful for developing and facilitating their teaching practice. Effective communication with teachers, staff, parents, and the community is the area that principals value the most, according to survey results. This implies that school principals understand the value of open communication channels and collaborative relationships in fostering an effective learning environment. Professional development plans for teachers and staff are the second most valued area, suggesting that principals recognize the need for continual professional development for their teachers. However, principals ranked best teaching practices dissemination processes as the least important area.



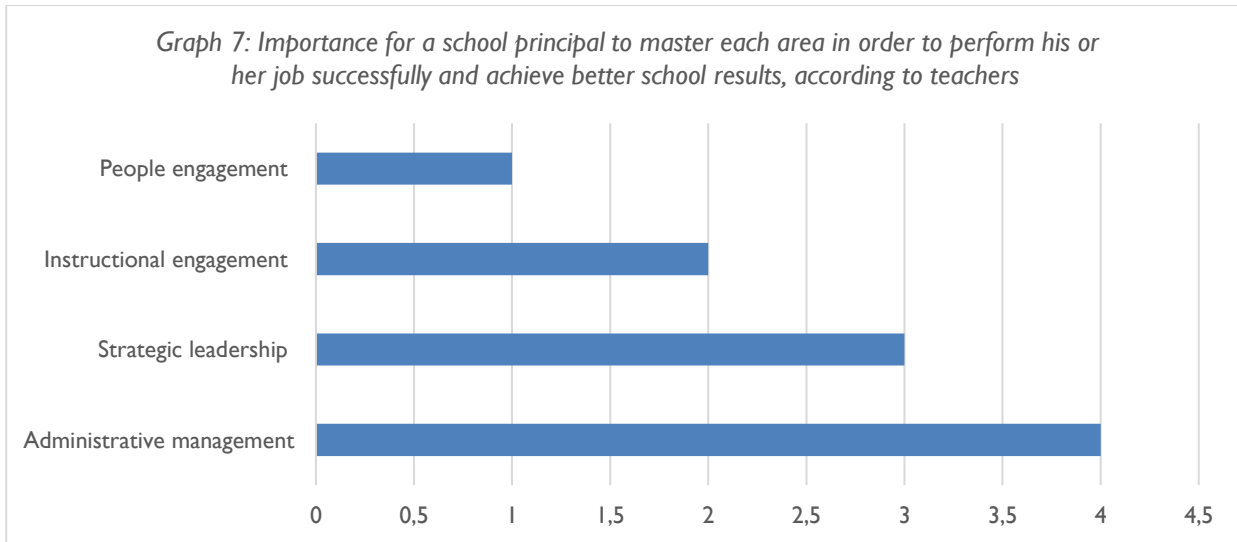
2.4.2.2. Teacher's survey

Question 1: Rank the dimensions of school direction listed below in order, depending on how important it is for a school principal to master each area to perform his job successfully and achieve better school results.

- Strategic Leadership
- People Engagement
- Instructional Engagement
- Administrative Management

This question informs the potential for impact criterion because it seeks to understand the areas that teachers believe are most important for a school principal to master to achieve better school results. By ranking the management areas in order of importance, teachers can provide insight into areas that principals should focus on to improve school performance and positively impact student outcomes.

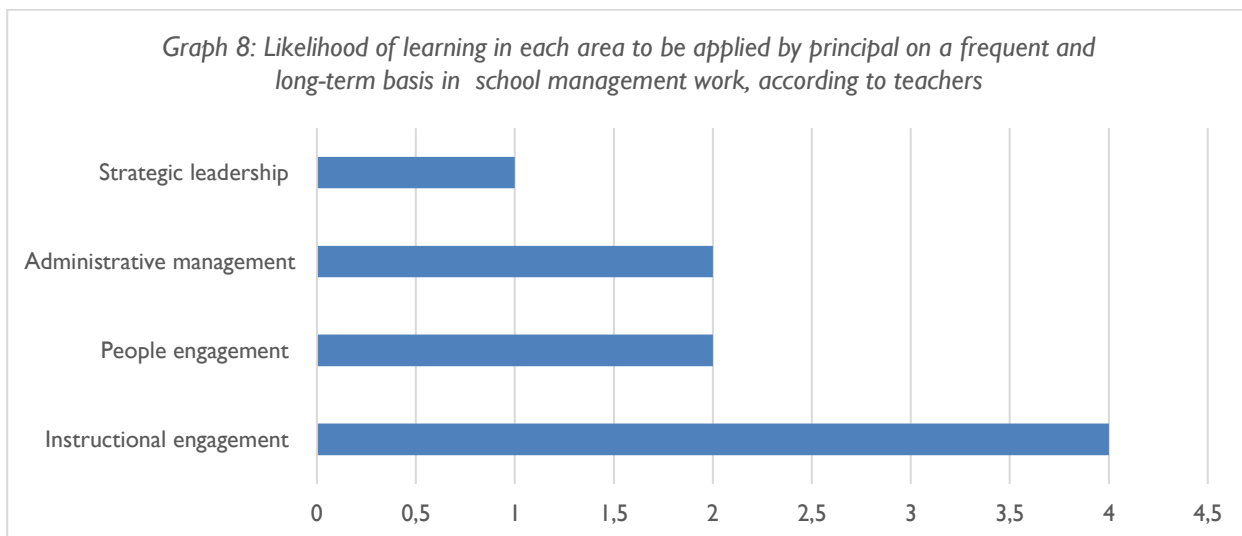
According to the survey findings, the most crucial area for teachers is people engagement, followed by instructional engagement and strategic leadership. The least significant aspect was administrative management. This suggests that teachers think principals should emphasize aspects like staff relationships and connections with students and parents above administrative work.



Question 2: Rank the dimensions of school direction listed below in order, depending on how likely it is that learning in each area will be applied by the principal of your school on a frequent and long-term basis in their school direction work.

- Strategic Leadership
- People Engagement
- Instructional Engagement
- Administrative Management

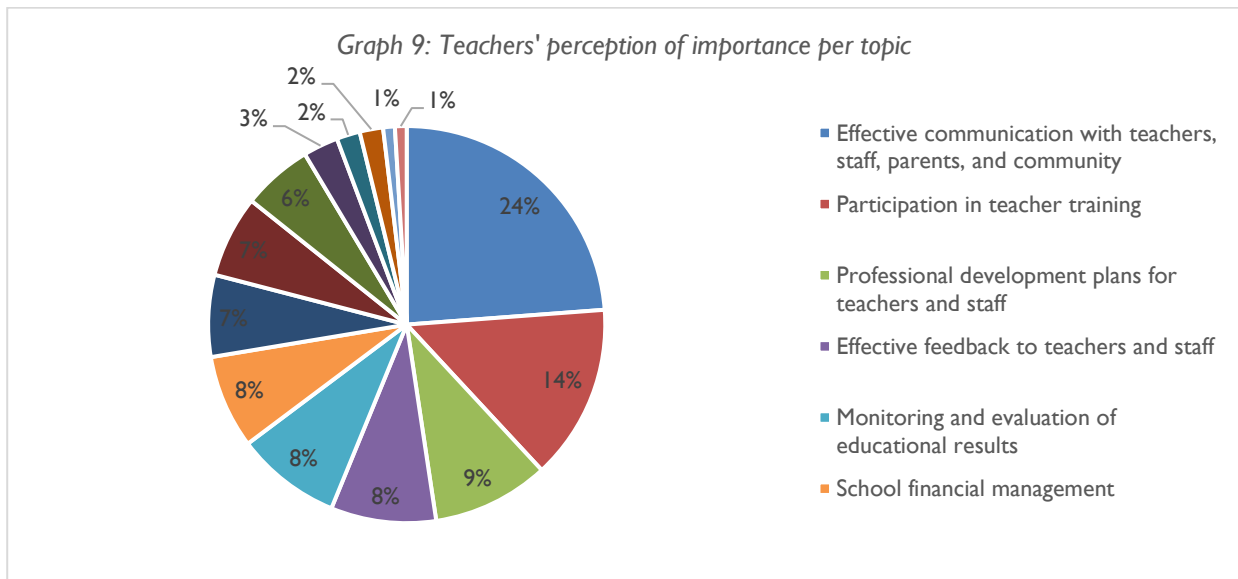
This question informs the sustainability of impact criterion because it seeks to determine how likely it is that the school principal will apply their learning on a frequent and long-term basis. The ranking of the dimensions by teachers will provide insights into the dimensions most likely to have a lasting impact on the school's performance. Based on survey data, teachers believe strategic leadership skills are those most likely to be implemented in the long-term by principals. On the other hand, instructional engagement was ranked the least likely to be frequently and sustainably applied by school principals, which could suggest that teachers feel that school principals may not prioritize instructional engagement skills.



Question 3: From the list of specific topics in school direction (i.e., 14 topics of Table 2) presented below, please indicate the three (3) topics that you value the most, in terms of the impact that its prioritization would have on improving and/or facilitating your teaching work.

This question informs the potential for impact criterion, since it aims to discover the precise topics that would most influence enhancing and/or facilitating the teachers' instruction. Teachers indicate which topics they feel will have the most potential for impact in their teaching profession by selecting the issues that they value the most.

According to the study results, teachers feel that effective communication with teachers, staff, parents, and community is the most important aspect in enhancing and facilitating their instruction, followed by participation in teacher training and professional development plans for teachers and staff. This indicates that school principals should focus their efforts on improving communication and providing ample opportunities for teacher training and professional development to meet the needs of their teachers.

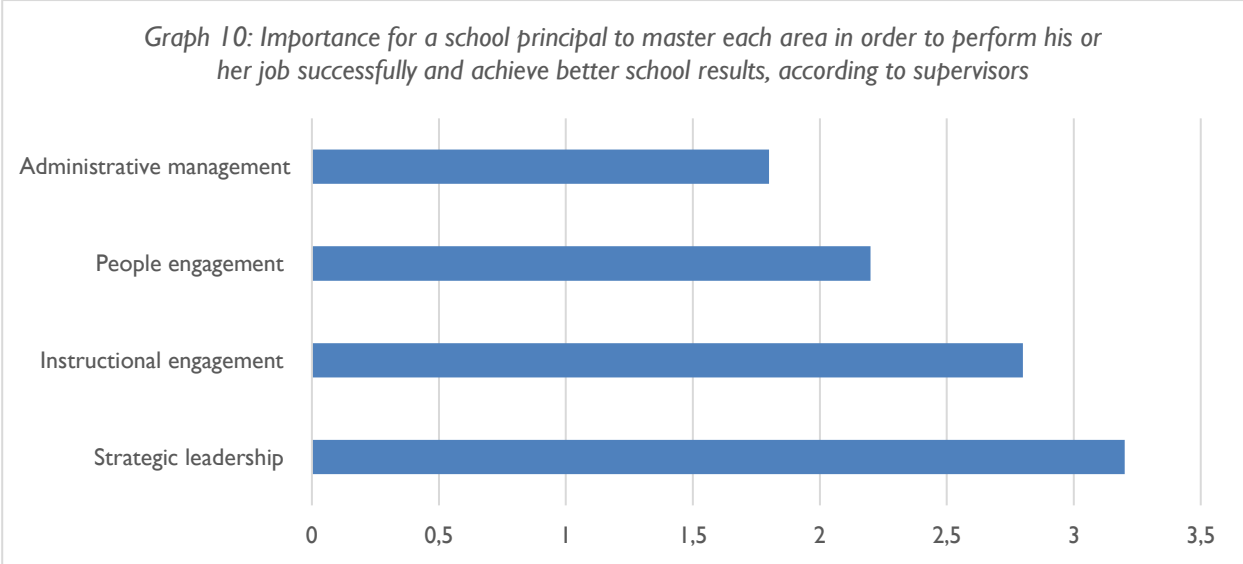


2.4.2.3. Supervisors' survey

Question 1: Rank the following dimensions in order, depending on how important it is for a school principal to master each area in order to perform his or her job successfully and achieve better school results (1 being the value corresponding to the most important area and 4 being the value corresponding to the least important area).

- Strategic Leadership
- People Engagement
- Instructional Engagement
- Administrative Management

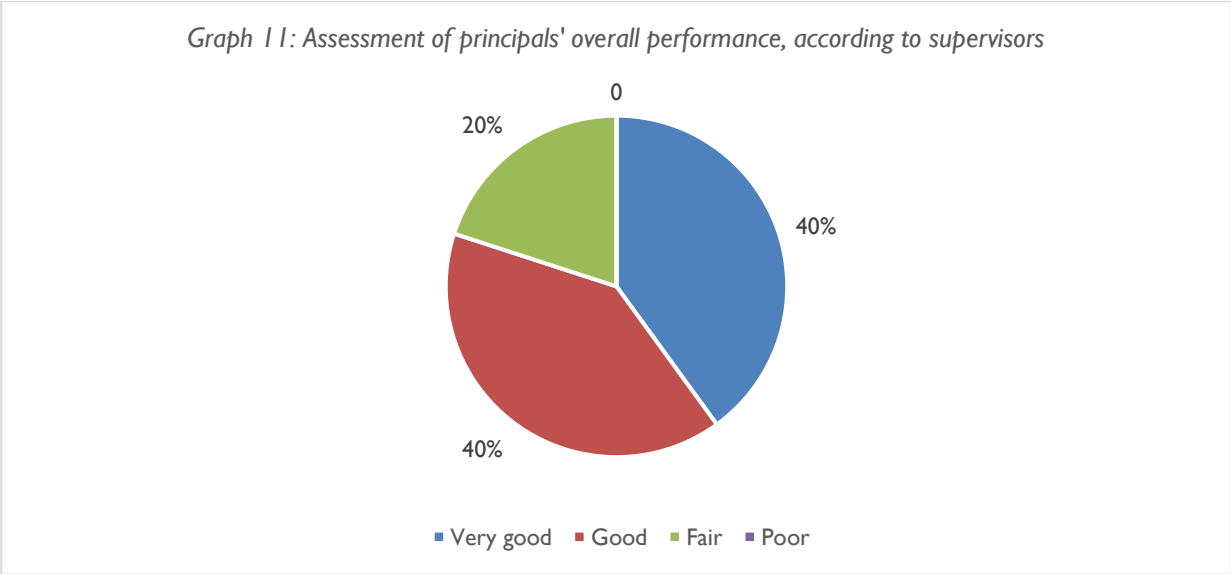
This question directly informs the authorities' buy-in criterion. The survey data shows supervisors ranked administrative management as the most important area for a school principal to master, followed by people engagement and Instructional engagement. Strategic leadership was ranked as the least important area, indicating that supervisors may not view this category as relevant.



Question 2: Please rate, in general terms, the work performed by the school principals in your jurisdiction.

- Very good
- Good
- Fair
- Poor

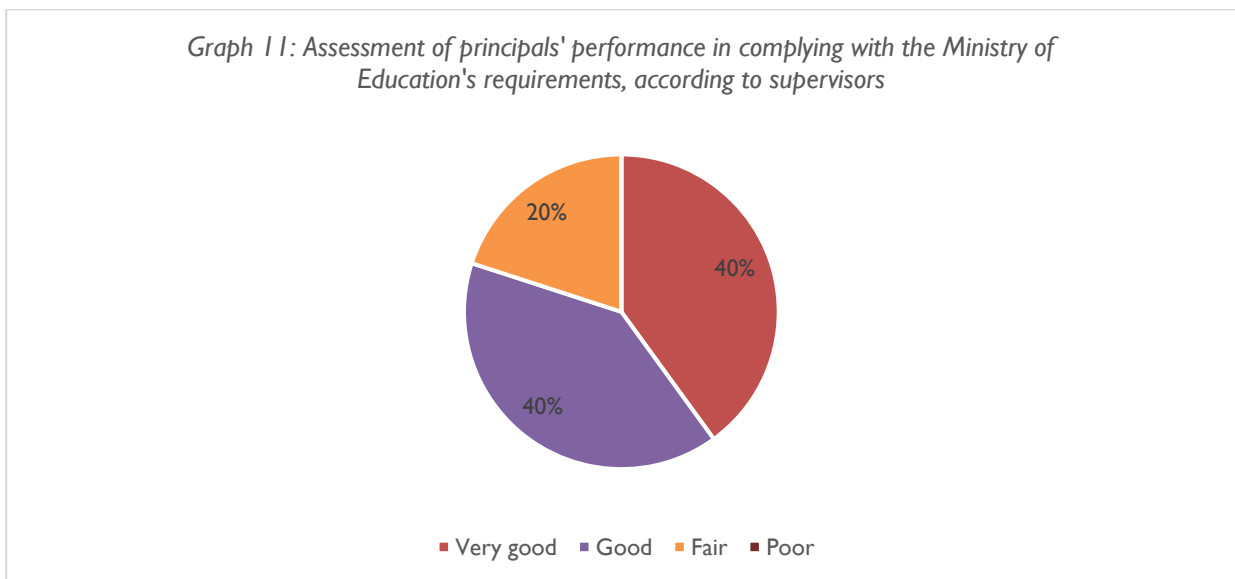
This question is useful to understand how school principals' work is seen by people who work directly with them and how their performance affects the school's overall success. The answers to this question can assist in identifying areas for improvement and places where principals should concentrate their efforts to obtain better results. Based on the survey results, most supervisors feel that the school principals in their jurisdiction are performing well.



Question 3: Please rate the work of school principals in your jurisdiction in complying with the requirements established by the Ministry of Education.

- Very good
- Good
- Fair
- Poor

This question seeks to ascertain school principals' conformity with the Ministry of Education's standards. The inquiry examines how well school principals comply with the educational authorities' directives and guidelines. According to the survey results, the majority of supervisors rated performance to be very good or good, suggesting that most supervisors believe school principals under their jurisdiction comply with the Ministry of Education's requirements in an adequate manner.

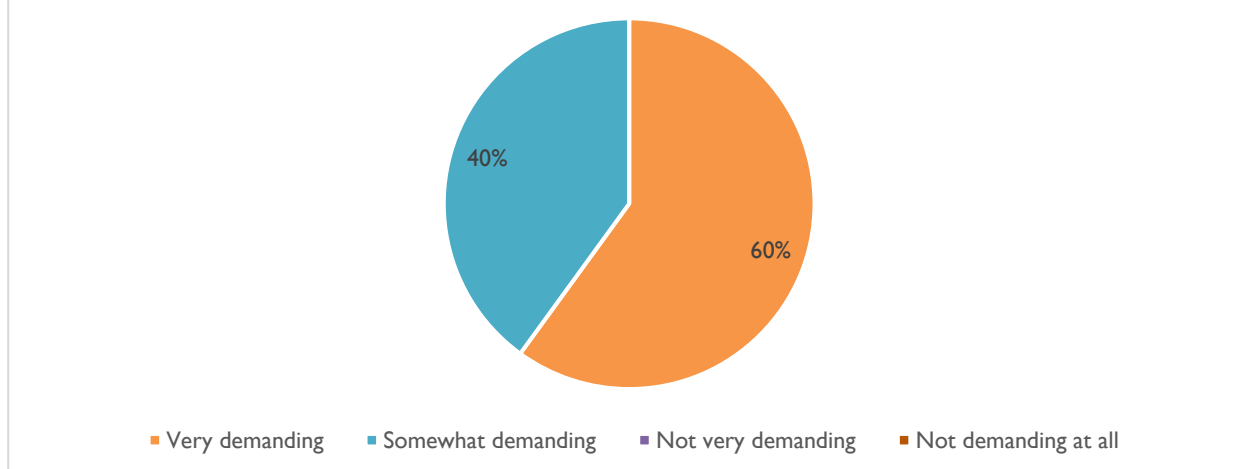


Question 4: How demanding do you consider the requirements established by the Ministry of Education to be in terms of the time required by the principals to achieve compliance?

- Very demanding
- Somewhat demanding
- Not very demanding
- Not demanding at all

This question seeks to gauge the level of demand placed on school principals by the Ministry of Education in terms of time required to achieve compliance with administrative requirements. All supervisors acknowledged that requirements are either very demanding or somewhat demanding, implying that school principals may find difficulties meeting requirements while simultaneously managing other areas of their work obligations. This might affect the time available for introducing new initiatives or training programs that could help improve schools' performance.

Graph 12: Extent to which compliance with administrative requirements on the part of principals is demanding, according to supervisors



2.4.3. Interviews analysis

The SIPA Pencils of Promise team, during its second visit to Guatemala, conducted a series of interviews with school principals, teachers and school supervisors. Interviews were conducted at five (5) schools in the departments of Suchitepéquez and Quetzaltenango. In total, the SIPA team interviewed twelve (12) people, of which six (6) are school principals, five (5) are teachers and one (1) is a school supervisor/authority. It is important to note that two of the interviewed school principals also work as teachers in their schools.

The objectives of these interviews include:

- Understand principals', teachers', and school supervisors' perceptions regarding key dimensions of effective school direction (i.e., strategic leadership, people engagement, instructional engagement, and administrative management).
- Identify the existence and characteristics of M&E practices at schools
- Gauge the work environment and performance drivers of teachers and principal at the school, with a particular focus on how the principal influences these aspects
- Identify other key stakeholders in the community, their relation with, and influence on the school

In addition to the cited objectives, the interviews allow for a nuanced and more detailed assessment of how certain leadership and management practices are related to better school and student outcomes, as seen in the observational work and analysis presented above.

2.4.3.1. Key insights of principals' interviews

This subsection elaborates on the responses provided by the six school principals interviewed during the second visit to Guatemala. All of the interviews, except for one, were conducted at the schools at which principals work. The remaining interview was conducted at an event with the Minister of Education on March 13th, where the principals' surveys were also conducted.

General perceptions of key dimensions of effective school direction

Regarding perceptions of the key dimensions of effective school direction, despite a slight preference for people management, surveys show no definitive trend. School principals in general believe all four areas are important. However, there appears to be a common understanding regarding the reasons why each area is important. These reasons are outlined below.

Strategic leadership: Principals noted that this dimension is key as mastering it provides a clear direction for the school to move towards. Principals state that it is not possible to lead or coordinate a team if a direction and specific objectives for the school are not previously established. Principals also mention the importance of communicating key elements of this dimension to teachers in order to align all actors. In one remarkable case, the school principal set a clear vision for their school focused on drastically improving the schools' facilities and establishing a school community based on collaboration and discipline. This has been the guiding principle for most of the school's decisions and all teachers, as well as other relevant stakeholders in the community, are informed and aligned with said vision. In most cases, however, despite being able to understand its importance, principals did not seem to be applying strategic leadership in a purposeful way at their schools.

People engagement: This dimension was slightly prioritized by school principals, but there is no definitive trend. However, the impact of this dimension is clear when analyzing the influence it has on staff motivation and alignment (see below). Most principals acknowledge the importance of this dimension as a tool to both generate a harmonious work environment and move others to action.

Instructional engagement: Interestingly, this dimension was not explicitly prioritized by any of the interviewed principals. However, they acknowledge the importance of this dimension as it pertains to the main activity of the school. In general, principals seem to deprioritize this dimension as it is, according to them, more within the purview of teachers and materializing inside the classroom. Compliance with the Ministry of Education's guidelines was also cited as a source of importance of this dimension.

Administrative management: There is common agreement with regards to the importance of administrative management as a tool to guarantee that the school has all necessary resources to provide its services to students, especially in a context of scarcity. However, it is not invariably prioritized by school principals, and some argue it is the least important dimension. One school principal argued that, even though resources are limited, through good administrative management the available resources should suffice to keep schools in good conditions.

Monitoring and evaluation

This area is probably the one in which schools are more similar. Of all interviewed school principals, none of them have professional development plans for their teachers or themselves. However, when the interviewer explained what professional development plans are (tools to identify individual strengths and areas for improvement and define a plan with milestones to boost strengths and work on areas of improvement), most principals expressed their interest and enthusiasm regarding the idea of having such a tool at their schools.

In terms of evaluation of students' and teachers' performance, all schools do pretty much the same. They all require bimonthly and annual teaching plans from their teachers, which serve as work plans in which

teachers determine the topics to teach each week. However, not all teachers have a plan. Invariably, all teachers collect information on the academic performance of their students, which in some cases is discussed in an “evaluation committee” composed by teachers—yet, most discussions involve specific cases of students who are underperforming as opposed to being used for strategic purposes. Classroom observation by the principal seems to be a common practice, but frequency varies. In some cases, principals have it as a common practice. In other cases, principals perform observation when a teacher is underperforming or has specific difficulties. Only in one school there seems to be an established practice of teacher-to-teacher support.

Work environment

In general terms, according to principals, the work environment at the schools is positive. However, tensions between staff were reported at some schools. The most common complaint is the division of staff between groups, instead of a single, cohesive team. In cases where the work environment is positive, collaboration seems to occur organically. Principals mostly prioritize giving every teacher the same treatment, as well as having a harmonious work environment. Some principals try to establish horizontal work relationships with their teams, yet it is unclear whether this approach undermines the principal’s authority as lead of the school staff. Some principals are aware that the relations between teachers are evidenced and replicated by students, and should therefore be taken care of to provide the right example. In general terms, the principal role is undesired and most principals would rather return or be full-time teachers instead. This implies that teachers do not necessarily aspire to become school principals.

Relations with other key stakeholders

The most important stakeholders, in order of influence, are parents and community leaders (usually the elderly). In general, schools have good relations with these stakeholders, but how deep and solid these relations are is variable. Schools with very strong relations with parents and community leaders seem to receive more collaboration and have more significant impact on the broader community. In some cases, relations with other actors, such as land owners, are important to prevent student absenteeism associated with child labor.

2.4.3.2. Key insights from teachers’ interviews

This subsection elaborates on the responses provided by the five school teachers interviewed during the second visit to Guatemala. All of the interviews were conducted at the schools at which teachers work.

General perceptions of key dimensions of effective school direction

In the same way in which principals did, teachers do not seem to have a definitive consensus on the relative importance of each of the four dimensions of effective school direction. In general, teachers consider the four areas complementary to each other. This subsection elaborates on the reasons why teachers consider these areas to be relevant for the school and their work.

Strategic leadership: This dimension was loosely addressed by teachers in their responses. Even though they acknowledge its importance, teachers’ comments focused on generic aspects like using strategic leadership as a tool to execute plans, establish a mission, have productive engagement with the community and draft broad objectives which can later be shared with parents. In general, it can be said that principals value the importance of this dimension more than teachers do.

People engagement: Even though principals were more open to comment on this dimension, it is unclear whether it is the most important. However, teachers' comments related to the work environment (summarized below) may speak to how impactful this area can actually be. Teachers' comments on this dimension focus on its importance to create cohesive, cooperative, and trust-based teams. One teacher also referred to the importance of people engagement in terms of its impact on staff's professional development.

Instructional engagement: Interestingly, this dimension was the least addressed by teachers. This is in line with the perception of principals too. There seems to be an implicit belief regarding this dimension according to which teachers are mostly responsible for instructional issues and the involvement of principals should be limited. However, some teachers do acknowledge the importance of this dimension to guarantee positive educational outcomes that contribute to the communities' development.

Administrative management: Even though it was not explicitly ranked as the most important, this dimension is the one for which teachers were more open to provide comments on. All teachers believe this dimension to be relevant in order to guarantee adequate facilities that are conducive to learning and overall good functioning. Probably most important is the fact that teachers consider this an area that is highly outside their purview and within the manageable control of principals instead.

Monitoring and evaluation

In this area, the responses of principals and teachers match almost perfectly. Teachers provided the same answers regarding professional development plans, recognizing a lack of them but expressing enthusiasm in some cases. The methods used to assess teachers' and students' performance are the same as those identified by principals. In one case, however, a teacher stated they would like more feedback and accompaniment from their principal.

Work environment

Generally, teachers have a slightly worse—though still positive—view of the work environment at their schools. The most common positive trend is collaboration between principals and teachers and between teachers. On the negative side, the most salient issues are a reluctance to feedback from the school principals, harsh or inappropriately given feedback to teachers, and a biased treatment, i.e., according to the affinity that some principals have with some teachers the treatment varies or, in other cases, the principal has weak character to call out and sanction misconduct. Both issues take an emotional toll on teachers affected by them.

Teachers who feel highly motivated cite aspects of school direction that significantly contribute to their motivation, including support from their principals on both professional and personal matters (i.e., “the principal has my back”), leading by example (“the principal is the first one to contribute and the last one to benefit”), and constant reminding of the mission and the importance of children as central stakeholders, especially in an environment in which teachers have their jobs guaranteed through unionization. Leading with character, understood as being flexible but firm, is a trait that is also valued by teachers.

Intrinsic motivation in most cases comes from two sources. On the one hand, a genuine desire to work and contribute to children's development and, on the other hand, the economic compensation received from the work. Principals who seem to motivate their teachers more tend to bolster these motivations

by constantly reminding teachers that children are the *raison d'être* of their work. In other words, without children there is no human development to work towards and no jobs for teachers.

2.4.3.3. Key insights from school supervisor interview

This subsection elaborates on the interview conducted to a school supervisor in the region of Suchitepéquez. This supervisor oversees a total of 44 schools in the region.

General perceptions of key dimensions of effective school direction

The school supervisor provided a clear ranking of the four dimensions. Strategic leadership was referred to as the most important. Very much in line with existing literature, the supervisor added that it is key for schools to operate as independent agencies in which mission, vision, and values, seen through a clear articulation of the specific value-add of the school, guide all decisions.

People engagement was ranked in second place. The supervisor added that fostering a harmonious work environment and opportunities for professional growth are at the core of school development. The supervisor also highlighted the importance of self-evaluation and peer-to-peer evaluation as a tool for professional development.

Instructional engagement was ranked third. The school principal stressed the importance of defining broad academic objectives regarding the types of thinking that want to be developed in students. Regarding this dimension, the supervisor also mentioned the importance of articulating the local context of schools to instructional efforts, i.e., how does the school contribute to the local context.

Finally, and contrarily to what the surveys conducted to other school supervisors, the interviewee ranked administrative management last and was emphatic in diminishing its overall importance relative to the other dimensions.

Perceptions about school direction work

The supervisor assessed school principals' average performance as "good". This same assessment was done when asked about the quality of the administrative work performed by principals. When asked to elaborate, the supervisor criticized that in many cases principals rotate too often.

Finally, when asked about how demanding the administrative work required by education authorities was, the principal stated that it was highly demanded and added that this work was done at the expense of more important tasks like fostering leadership, team work, relations with other key stakeholders in the community, improved communication and negotiation, and instructional engagement.

2.5. Framework assessment and recommendations

This subsection presents the results of the framework assessment described throughout section 2 and summarized in Table 2 below.

Each topic was assessed using the four framework criteria. For each topic, an individual score between 1 and 5 was given for each criterion. As noted above, topics that score higher on each criterion receive a higher numerical score. When an individual score was given to each topic in all of the four criteria, the scores for each criterion were averaged (using a simple mean method) to arrive at a final score per topic.

The final scores for each topic were then ranked from higher to lowest and classified into three tiers (i.e., green, yellow, and red) resembling a traffic light.

- The topics with the five highest scores appear on the **“green” tier**, meaning these are the topics that the SIPA team recommends PoP to prioritize in their training efforts.
- The topics with the next five highest scores appear on the **“yellow” tier**, and could be addressed by PoP as part of their training efforts as long as the implementation efforts are low-hanging fruit (i.e., things that can be most readily or easily done with little effort).
- The topics with four lowest score appear on the **“red tier”**, meaning these are topics that the SIPA team does not recommend to prioritize, unless they are deemed as easier to implement than the topics in the other two tiers.

To arrive at the specific scores shown in columns 2 to 5 of Table 2 below and following the information sources for each criterion presented in section 2.3.2, quantitative data from survey analysis was used to provide a base score for each topic and each criterion. Each score was qualified (one point was either added or subtracted) using qualitative information from the interviews and observational research analyses. These adjustments were done when the interviews and/or observational research analyses contained additional information that would justify a qualification of the score. Otherwise, the score remained unaltered.

Table 2. Results of the framework assessment – The “prioritization traffic light”

Topics	Principals' receptiveness	Potential for impact	Sustainability of impact	Authorities buy-in	AVERAGE SCORE
Effective communication with teachers, staff, parents, and community	5	5	3	4	4,3
Professional development plans for teachers and staff	5	5	3	4	4,3
Building of relationships based on trust and cooperation	4	4	3	4	3,8
Availability of the principal and optimization of time	4	4	3	4	3,8
Effective feedback to teachers and staff	2	5	3	4	3,5
Participation in teacher training	3	5	4	2	3,5
Dissemination processes of best teaching practices	3	4	4	2	3,3
Definition of mission, vision and institutional values	4	3	3	2	3,0
Development of curricula with a focus on relevance and context	3	3	4	2	3,0
School financial management	3	2	3	4	3,0
Monitoring and evaluation of educational results	2	3	4	2	2,8
Management of non-financial resources of the school	2	2	3	4	2,8
Administrative management of the school's human resources	2	2	3	4	2,8
Resolution of conflicts and contingencies	3	2	3	2	2,5

Results show that all topics within the “people engagement” dimension are part of the “green tier” or prioritized topics. This is consistent with the literature, which invariably highlights the importance of people (e.g., motivating, aligning, organizing, caring, communicating, etc.) when addressing topics like leadership, management, and community engagement. As the framework assessment suggests, this is also consistent with the perceptions of key stakeholders in the context of Guatemala, who

acknowledge the importance of concentrating on people as a strategy towards improved school and student outcomes.

Conversely, most topics within the “administrative management” dimension, even though important, as all 14 topics ought to be, ranked in the lowest positions of the assessment. This could imply that even though administrative management is important, particularly in a context of limited resources, good administrative management is not the cause, but rather the consequence of adequate people engagement.

3. RECOMMENDATIONS OF TRAININGS IMPLEMENTATION

Building upon the five prioritized topics presented at the end of the previous section, this section presents a menu of six tools and strategies for each of the prioritized topics. In addition to the recommendations, this section elaborates on the information sources used during the process (i.e., literature, PoP’s existing materials, information gathered during the SIPA team’s visits to Guatemala, and interviews with NGOs working in the field of school leadership).

3.1. Overview of the methodological approach

This section aims to present a brief overview of the SIPA team’s methodological approach to demonstrate the breadth of analysis that the team has conducted in understanding the topics of leadership, school management, and community engagement along with its four dimensions (i.e., strategic leadership, people engagement, instructional engagement, administrative management). The main objective in presenting an overview of the information and data-collection sources used by the SIPA team is to streamline the team’s efforts to substantiate the recommendations presented in this section. As stated above, in maintaining the importance of providing recommendations contextualized to Guatemala’s context, recommendations are presented around prioritized topics from section 2.

The SIPA team’s efforts to provide PoP with viable recommendations emanate from using a total of four information sources and data-collection activities, including PoP’s materials, existing literature, in-country fieldwork, and interviews with existing NGOs carrying out similar work in other countries. This section provides a brief overview of each and every one of those sources and data-collection activities and their respective findings relevant to the topic and action-based recommendations provided at the end of this section. Diagram 2 below visualizes the team’s approach to arrive at the recommendations presented in this section.



3.1.1. PoP’s related materials

Pencils of Promise supplied the SIPA team with an array of substantial materials. While the documentation PoP provided has been instrumental in other areas of the Project such as drafting Deliverables 1 and 2, this section focuses on presenting information that is pertinent to the objective of this report—providing recommendations. This summary of PoP’s material findings has a deliberate focus on skills within the four-dimensional areas of strategic leadership, people engagement, instructional engagement, and administrative management.

The SIPA team has found that PoP’s materials are particularly prevalent in the dimensions of ‘people engagement’ and ‘strategic leadership’ skills. For example, the “Teacher Support Program Logical Framework Guatemala - Final Report” outlines key activity efforts to be fundamental in producing outputs such as “principals made aware and trained in teacher support strategies, school supervision, and leadership” that would require school principals to understand and use people engagement and strategic leadership skills in order to effectively achieve said outputs. Furthermore, PoP’s Theory of Change presents a structured web-like planning of necessary preconditions to produce the expected long-term goal of PoP. However, the model presents causal linkages that also require school principals to possess people engagement and strategic leadership skills to attain the desired outcomes illustrated in PoP’s Theory of Change

Other key documents are the “Country Wrap Report 2020 Guatemalan School Year” and the “Currículo Nacional Base - Ministerio de Educación Guatemala”, containing important information about PoP’s operational in-school programs. The report and the curriculum provide a general structure of the WASH and Teacher Support programs, along with an overview of their objectives and methodology. Other documents such as the “Plan de Mini-Taller de Gestión” and “Plan de Acompañamiento de Gestión”, give us a closer overview of the program’s day-to-day design and objective of trainings. Together, these documents help the SIPA team understand not only the long-term objectives outlined in the conceptual model framework and Theory of Change, but it gives a deeper sense of understanding of how PoP plans to achieve those comprehensive outcomes through its short-term goals and methodological approaches. **The insights gained in the more practical materials further strain the importance of developing school principal skills, in particular, those prioritized by the assessment presented in this report.**

3.1.2. Literature review

To assist PoP in enhancing the leadership, school management, and community engagement skills of their principals, the SIPA team conducted research on these topics by examining external literature, mostly contained in Deliverable 2. The team evaluated various frameworks, leadership programs, and research publications that explored and identified the link between developing strong school leaders and improving school student outcomes. In addition, the SIPA team collected information from lectures, Ted Talk conferences, and SIPA’s management courses that discuss the importance of developing good quality leaders and a collaborative school culture.

Additionally, literature review allowed the SIPA team to identify four key dimensions of school management that are essential for a school’s success. **The identification of these four dimensions is a significant contribution to the field of education, as it highlights the multifaceted nature of successful school leadership and provides a framework for schools to evaluate their management practices and make improvements where needed.** Once these four dimensions were identified, it assisted the SIPA team to specify key topics within each dimension that led to narrowing down and informing the type of recommendations the SIPA team should make to PoP.

3.1.3. Visits to Guatemala

The SIPA team made plans to travel to Quetzaltenango, Guatemala, during January and March of 2023. In outlining the team’s work plan for the semester, the team concluded that in order to maximize usage of time and resources, two different groups would travel to Guatemala on separate occasions for different

purposes. Each trip had its specific goals and objectives that the SIPA team references as valuable input for producing final recommendations.

3.1.3.1. January Trip

On January 8th, two team members traveled to Quetzaltenango, Guatemala, for a total of 6 days, where they spent most of their time getting to know the PoP team as well as the organization's functionalities. During their time at the PoP offices, the SIPA team conducted several interviews with staff members using an interview guide they designed before arriving in Guatemala. The objective of those interviews was to better understand the intricate roles of the staff, but more importantly, to identify the areas that PoP found the most difficult when engaging with school principals.

Additionally, the two SIPA team members traveled to the region of Mazatenango to conduct interviews with multiple school principals and teachers. The findings of those interviews and the data collection from the January trip led to several conclusions. The first and arguably one of the most important outcomes of the trip is that, in a meeting with PoPs staff and its country director, Jorge Caal Bolóm, the SIPA team gained a clearer understanding of what PoP hoped to gain from the EPD Workshop work, which ultimately influenced the direction of the Project and the team's approach.

Secondly, the January trip allowed the SIPA team to gauge PoP's efforts and goals for engaging with principals, and the data gathered during the interviews with both school teachers and principals narrowed the scope of work to focus on what the SIPA team found were the more crucial areas for principal trainings. Thus, the January trip was instrumental in the formulation of the four dimensions of effective school direction highlighted in Deliverable 2 and in identifying principals' main challenges (i.e., time constraints) to further narrow down the work that culminated in the short menu of tools and strategies presented in this report.

Lastly, while the January trip was imperative to the design and approach of the work, it also gave the SIPA team an insight into some systemic limitations (see section 4 below), particularly the tremendous role the Ministry of Education plays in the work PoP is hoping to achieve and the challenges it poses to those efforts.

3.1.3.2. March Trip

In addition to the January trip, the SIPA team traveled to the Suchitepéquez region of Guatemala during the week of March 13-17 to gather more insights from school stakeholders. The team conducted surveys, school observations, and interviews with Ministry of Education district supervisors, PoP's school principals, and teachers. This work, as stated above, aimed at assessing stakeholders' attitudes and interests regarding the four dimensions of effective school management and 14 key topics derived from Deliverable 2 to inform the framework assessment presented in this report.

Through these interviews and surveys, it became clear that a major challenge faced by principals is lack of time, which hinders their ability to efficiently complete necessary tasks. The supervisors acknowledged the heavy workload placed on principals by the Ministry of Education, but also recognized their adequate performance. Additionally, both principals and teachers expressed a strong interest in seeking professional development opportunities to enhance their skills and abilities. Effective communication, trust, and cooperation were also identified as areas that needed improvement between principals and teachers.

3.1.4. Interviews with NGOs in the field of school leadership

An integral part of the work presented in this section involved interviews with other organizations directly involved in the mission of building strong school leaders in developing countries. This subsection presents the key takeaways of the SIPA team's engagement with two NGOs working in the field in India.

3.1.4.1. Akanksha

During their research, the SIPA team consulted with other NGOs operating in a similar capacity to PoP to gather information about techniques that could be relevant and useful when developing trainings. One of the NGOs they met with was [Akanksha](#), a non-profit organization in India that focuses on delivering high-quality education to children from diverse backgrounds. Akanksha achieves this through a program they created that develops school leaders and by partnering with the government to create a model school system that can drive more systemic educational reform. The SIPA team spoke with the **Manager of Operations, Doney Biju**, who had previously undergone Akanksha's teacher development program to gain insight into their methodology and strategies for designing effective workshops and training programs for school leaders.

From the interview, it was clear that Akanksha also believed that leadership, school management, and community engagement were foundational pillars for better student outcomes. The organization emphasized the importance of community engagement and believed that parents should be partners, not just participants, in their child's education. Akanksha has developed various programs to enhance the capacities of parents, including financial literacy, basic English literacy, and technological literacy courses. They also have a parent committee within schools that allows parents to have a voice in making important educational decisions regarding their children. Akanksha values the opinions of their students and has created a student council program where every grade level has a representative to provide input when the organization needs to make an important decision. By involving every member in a student's education, Akanksha has established a highly collaborative network where all opinions and thoughts are welcomed, and everyone feels safe to contribute ideas on how to provide a quality education to students.

3.1.4.2. Alokkit

[Alokkit](#) is a non-profit organization operating in underprivileged communities across India working to empower school leaders and educators through training and coaching to achieve better student outcomes. The organization program model is a threefold approach focusing on training, coaching and community through learning circles within four areas of focus – strategic, people, instructional, and personal leadership.

The SIPA team met with is **Alokkit's Co-Founder, Baidurya Sen**. From the discussion with Sen, it is clear that similar to PoP, Alokkit understands the important role school principals play in the four aforementioned areas of focus for the materialization of improved school and student outcomes. Hence, most of their work is focused on finding ways to bolster these areas and empower principals. However, Alokkit's co-founder stated that to empower school principals it must first work with government and government officials to help them understand why empowering school principals is a necessary prerequisite to improve school and student outcomes. Therefore, for the most part, the work Alokkit has carried out to achieve its goal of empowering school principals and leaders has been focused on building a better relationship between the government and government officials and schools principals.

The organization is relatively new as it was only founded in 2020, so Alokrit is still working on developing its capabilities, but they are hoping to do more work in the area of training school principals in the future. The limited work they have done, however, did not limit Alokrit's co-founder in providing us with useful information about the actions and strategies they have started implementing (or are hoping to use) to improve school principals' skills, particularly in topics similar to those prioritized in section 2 of this report.

3.2. Recommendations on specific tools and strategies

This section presents six tools and strategies for PoP to implement as part of their trainings efforts with school principals.

The SIPA team's feasibility framework utilized four categories to evaluate the usefulness of each topic for PoP's workshops and training programs: principals' receptiveness, potential for impact, sustainability of impact, and authorities' buy-in. As described in section 2, through this framework the SIPA team concluded that the topics with the highest prioritization scores were (i) effective communication with teachers, staff, parents, and the community; (ii) professional development plans for teachers and staff, (iii) building relationships based on trust and cooperation, (iv) availability of the principal and optimization of time, and (v) effective feedback to teachers and staff.

Using the data collected from various sources mentioned in section 3.1, the SIPA team substantiated their recommendations for PoP on these topics. As these topics are interconnected, the recommendations will overlap to assist in multiple topic areas.

3.2.1. The Eisenhower Matrix

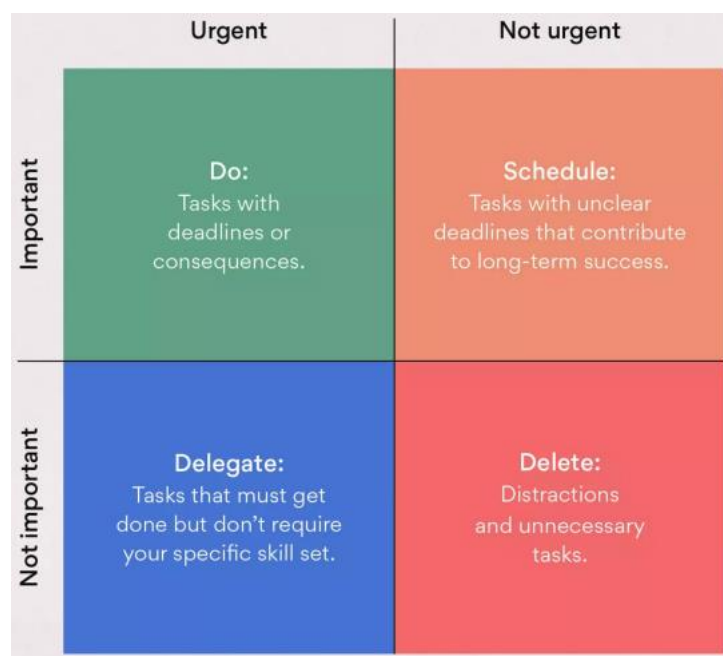
Topics addressed by this strategy/tool: Availability of the principal and optimization of time

After conducting interviews with supervisors, principals, and teachers, it became apparent that school administrators were facing significant time constraints. They were required to handle multiple administrative tasks mandated by the Ministry of Education, which left them with limited time to complete all their work during a typical workday. To help optimize their time more efficiently, the SIPA team recommends the use of the Eisenhower matrix, a time management tool that separates tasks based on their urgency and importance. In this context, urgency and importance refer to tasks that have a deadline, not completing which may lead to consequences, and completing which will contribute to achieving long-term goals (Asana, 2022)

The matrix is divided into four quadrants labeled “Do”, “Schedule”, “Delegate”, and “Delete”. Diagram 3 below visualizes the four quadrants. Quadrant one contains tasks that a school leader should “Do”, as it contains tasks that are both urgent and important and have strict deadlines. These are tasks that will definitely contribute to the long-term goals of the organization. Quadrant two contains tasks that should be “Scheduled”. These are tasks that are important but do not have a strict deadline, thus they can be scheduled to be completed at a later date. Quadrant three is “Delegate”, which includes tasks that are important but not urgent. Since these tasks are not necessarily critical but still need to be completed and do not require a specific skill set, they can be delegated to other staff members. Quadrant four is ‘Delete’ and it includes tasks that are neither important nor urgent and can be deleted. This will help to eliminate any unnecessary work for school leaders in hopes of saving them more time on the tasks that do matter.

It is suggested that administrators create a to-do list of all their tasks first and then place them in their corresponding quadrant, with a limit of 10 tasks per quadrant. This approach will allow school administrators to prioritize their time and focus on the most critical tasks that will contribute to achieving their long-term goals while effectively managing their workload (Asana, 2022)

Diagram 3. The Eisenhower Matrix (Asana, 2022)



3.2.2. Cluster groups meetings

Topics addressed by this strategy/tool: Professional development plans for teachers and staff + Effective feedback to teachers and staff

The SIPA team’s in-country work demonstrated that school leaders have a strong interest in professional development opportunities. Through literature review and conversations with Akanksha, the SIPA team has learned about the advantages of developing schools into professional learning communities (PLCs). By creating a collaborative environment that strengthens the skills of school administrators, PLCs can benefit both school leaders and principals, resulting in better student outcomes.

In a professional learning community or cluster group, school principals from multiple communities and program coordinators come together in a workshop-style format to collaborate and discuss strategies that promote a positive school environment. **Essentially, PLC serves as a feedback cycle** that can be broken down into three moments. Diagram 4 below visualizes the cycle.

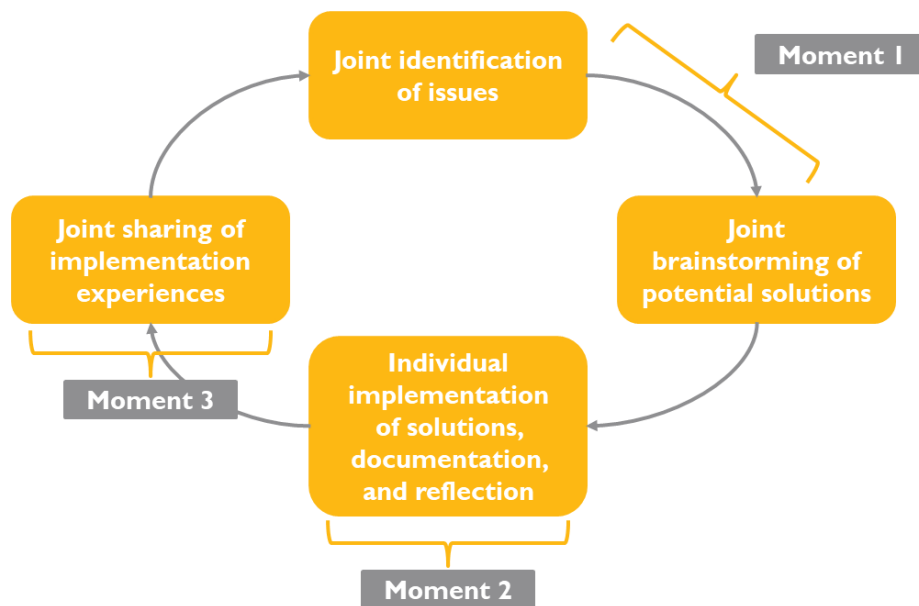
The first moment is collaborative and consists of two activities. Firstly, principals from various schools work jointly with program coordinators (i.e., PoP staff) in a workshop to identify the most pressing issues they face as leaders. Secondly, in-person collective brainstorming is conducted. Program coordinators research several pedagogical methods that can help solve specific challenges, while experienced school leaders can share their strategies that have helped with those challenges. Literature from Darling-Hammond et al. (2022) has shown that fostering a non-hierarchical

environment where everyone feels free to share their ideas and experiences promotes enhanced motivation, increased activity, and mutual assistance. Learning through social activities is productive for adult learners. At the end of the workshop, the school principals will have a new strategy in hand that they must implement in their schools.

In the next moment of the cycle, school principals return to their respective schools to implement the learned strategy. They are required to keep a "cluster journal" in which they reflect on their experience. The reflection should include details on the strategy, how it was implemented, whether it worked for everyone or only certain individuals, and what tweaks were necessary. It should also cover how the strategy affected their leadership or management outcomes. The journal helps keep principals accountable as they are asked to provide photo evidence of implementing the strategy or the actual work produced by it.

Once this moment has been completed, the final part of the cycle is to return to the next workshop meeting, report on experiences and reflections, and engage in open discussions on how to address difficulties encountered and what to do in the future. Then, participants learn about the next strategy, and the cycle renews. PoP can also implement this with school principals and teachers. Principals can ask their staff to keep a cluster journal as well, noting down strategies learned from their professional development workshops, answering the same questions as above, and monitoring how it affects student outcomes. This cycle promotes continuous learning and engagement from all parties, building a more trusting relationship between teachers and principals.

Diagram 4. The cluster groups meetings cycle



3.2.3. Professional development grids

Topics addressed by this strategy/tool: Professional development plans for teachers and staff + Effective feedback to teachers and staff

Professional Development Grids are a powerful tool that can greatly enhance individualized professional development opportunities. These worksheets are designed to help individuals identify their goals, whether it is to improve upon a weakness or strengthen an already proficient skill. The number of goals that can be listed is unlimited, and PoP can work with their principals to fill out this worksheet to ensure that the goals are clear and achievable. The next step is to break down each goal into specific activities and steps that need to be taken to achieve them. A timeline is essential, and regular check-ins should be scheduled to monitor progress. To ensure accountability, the individual should fill out a self-assessment to monitor their progress, and an end date should be set for when the goals need to be met. Adding other types of assessment of progress, like peer evaluations, is highly recommended.

Once the principals have mastered this tool, they can conduct their own professional development grids individually with each of their teachers and use the same process to help them reach their goals. This will create a culture of continuous learning and development within the school community, which will lead to better outcomes for all stakeholders. Diagram 5 below presents an example of a professional development grid for a school principal.

Diagram 5. Example of development grid for a school principal, developed by [Instiglio Inc.](#)

Development Goal #1		Consolidate general leadership skills	
Activities	What is required to achieve this?	Assessment	Timeline
Strengthen leadership skills to create a positive leadership image in teachers through active coaching and empathy	<ol style="list-style-type: none"> 1. Assist to PoP trainings for principals 2. Engage in activities that involve coaching teachers and using an empathetic approach. 3. Individual research on team leadership. 4. Apply learnings and knowledge. 	Self-assessment + teachers feedback	Jan 2023 - Dec 2023

3.2.4. Master schedule

Topics addressed by this strategy/tool: Availability of the principal and optimization of time + Building of relationships based on trust and cooperation

The master schedule for principals is a tool for setting aside time blocks for professional development and individualized time to build relationships with teachers and students. Based on research by Eaker and DuFour (2015) and insights from NGO interviews, incorporating a master schedule is an essential tool for effective time management. The master schedule should include all types of activities and learning periods, not just instructional periods, and designate time blocks for non-administrative tasks as well.

For instance, the professional development grids recommended earlier can be integrated into this schedule to help principals meet with their instructors and provide them with the professional development support they need. Moreover, by providing more time blocks for professional development opportunities or non-administrative tasks, principals can build a more trusting relationship with their teachers. This will help to foster a more collaborative work environment and improve overall teacher performance, leading to better student outcomes.

From the SIPA team's interactions with teachers and school leaders, it is evident that adhering to schedules is crucial, and having a well-organized master schedule that encompasses all types of activities and learning periods can significantly assist principals in managing their time more efficiently and maximizing their productivity. By adopting a master schedule approach, school leaders can prioritize their time effectively, ensure that important tasks are completed, and create a work environment that promotes better outcomes for teachers and students.

3.2.5. “Cafecito con panito” discussion

Topics addressed by this strategy/tool: Effective communication with teachers, staff, parents, and community + Building of relationships based on trust and cooperation + Effective feedback to teachers and staff

This is a contextualized activity in which principals meet with teachers, parents, and even community members, to provide exclusively positive feedback regarding their efforts and contributions to the school. One of Alokít's co-founder's suggestions, which they have found helpful for building effective communication and trust between school principals and teachers, parents, and community members, is designating a strictly positive feedback time slot in their schedule.

The idea of creating a strictly positive time slot specifically aimed at providing positive feedback or highlighting the individual efforts of people, is to ensure that school principals are communicating with teachers, parents, and community members beyond the administrative work or challenges facing the school. Because of the unique context of the schools in Guatemala that PoP operates in, it is easy for school principals afflicted with a multitude of challenges to focus on the negative and overlook the invaluable work carried out by teachers and the community. This fact highlights the importance of this recommendation.

In contextualizing this recommendation to schools, provided the resources available, school principals can even go a step further by incorporating a reward system to reward individuals for their extraordinary work. This action strategy can be included in the master schedule to help create or improve effective channels of communication between principals and teachers/parents/community to build trust that can serve to further their cooperation efforts.

In further contextualizing this recommendation to Guatemala's setting, **the SIPA team proposes that those strictly positive time slots designed to create a positive only environment are spent drinking a cup of coffee and enjoying traditional Guatemalan pastries.** This idea stems from the designated time slots the SIPA team found in PoP's workshop plans that specifically allotted time for coffee breaks. Additionally, during the January trip, the SIPA team noticed how important coffee can be in Guatemalan work culture, so this recommendation seeks to extend this observation as it is an inexpensive form for principals to enhance their communication skills and build trust.

3.2.6. 1-1-5 meetings

Topics addressed by this strategy/tool: Effective communication with teachers, staff, parents, and community + Building of relationships based on trust and cooperation

The last and final recommendation is based on the importance of developing personalized relationships between school principals and teachers. **This is a short activity (5 minutes approximately) in which**

principals meet with teachers on a 1-1 basis and are encouraged to create personal connections.

In reviewing PoP's materials, the SIPA team noticed that school principals have not allocated or have not been encouraged to allocate a time slot to individually check in with their teachers regularly. Furthermore, the literature review has shown that creating a close relationship with school teachers can help school principals gain support to carry out initiatives. Hence, this recommendation seeks to fill that gap through a short daily five-minute activity designed for school principals to meet with teachers on a one-on-one basis to create those much-needed personalized relationships in an unstructured manner.

The idea is that school principals will set aside time to meet with a teacher informally (thus, 1-1) for a period of five minutes to discuss anything, although principals are encouraged to talk about more personal matters to facilitate fostering a better relationship and trust with their teachers. Keeping in mind the time constraints facing school principals, this action strategy only requires that principals meet with a single teacher every day or every other day until circling back to the first teacher. In order to maintain consistency in meeting with teachers, school principals are encouraged to include this recommendation in their master schedule designed for non-administrative activities.

4. LIMITATIONS

This section identifies and acknowledges the limitations identified at various levels of the Project's implementation. It does so by dissecting limitations in three distinct levels. First, systemic issues that are outside PoP's manageable control but may affect the extent to which principals' training can impact student and school outcomes. Second, areas for improvement within PoP's manageable control that, when addressed, may positively contribute to achieving better outcomes. Third, methodological issues and limitations that the SIPA team faced while conducting its work during the course of the Project.

4.1. Systemic issues

Systemic issues are external and are therefore outside PoP's manageable control. These issues may hinder PoP's efforts with the implementation of trainings for school principals and the materialization of improved schools and student outcomes. During the Project's implementation, the SIPA team identified a single major systemic issue—the role of Ministry of Education. However, within the role of the Ministry of Education, the SIPA team has noted four major challenges that may limit PoP's efforts. **Despite being outside of PoP's manageable control, PoP may use this assessment to advocate for improvements or solutions to these systemic issues before the Ministry of Education.**

The first challenge is the overwhelming administrative requirements from the Ministry of Education to school principals that occur at the expense of other important responsibilities. The SIPA team first ascertained this challenge during the January visit through interviews and observations with PoP staff, school principals, and teachers. However, it was during the March visit that through data collection the SIPA team was able to observe that 80% of surveyed school supervisors from the Ministry of Education agree that school principals do a “very good” or “good” job at complying with administrative requirements. Most importantly, all surveyed school supervisors acknowledge that the requirements of the Ministry are either very demanding or somewhat demanding. Therefore, school principals need to be allowed to look beyond the Ministry's administrative requirements to focus on other crucial areas of their work as suggested in this report. This argument can be further substantiated by the literature review presented in Deliverable 2, that asserts school principals' non-administrative responsibilities are critical in improving school and student outcomes.

The second challenge is the rotation of school principals and teachers by the Ministry, which can impede consistency in the implementation of PoP's initiatives. The SIPA team first noted this to be a challenge during initial interviews with school principals and teachers who shared that work carried out by school principals with PoP can be lost or undermined in the presence of a new principal assuming the role. While the rotation of principals and teachers can pose challenges for PoP and the schools, the Ministry of Education indicates there are certain benefits that the SIPA team believes need to be further investigated in the context of Guatemala to determine its advantages and disadvantages.

Third, the SIPA team identified the lack of funding in schools as a limitation that can impact school principals' efforts to implement initiatives. This limitation was observed through literature review and interviews and observations made in both trips to Guatemala.

The fourth identified challenge is related to the relationship between PoP and the Ministry of Education. Two issues arise here. First, the requirement of Ministry approval of PoP's initiatives may

affect the timely or prompt implementation of PoP's initiatives with school principals. Second, since the relationship between PoP and the ministry has not been officially formalized or incorporated into their educational plans, this may have an impact on the implementation of PoP's initiatives with school principals and their buy-in with principals, as observed through interviews and observations with PoP staff, school principals, and teachers made on both trips. In presenting the external limitation in this section, it is noteworthy to comment that many of the external challenges discussed that are within the purview of the Ministry of Education are also supported through interviews conducted with other NGOs and the work they are carrying out in their respective countries.

4.2. Internal areas for improvement

The SIPA team has identified internal areas for improvement within PoP that, when addressed, may positively contribute to achieving better outcomes. **These are factors that are manageable and within PoP's control and focus mainly on data collection tools and processes within PoP's evaluation and implementation strategies.** While PoP has collected a significant amount of data regarding the implementation of activities and outputs of their work, they have yet to measure the outcomes (i.e., long-term results) of their programs, which they have acknowledged as a significant gap. One of the main limitations is the absence of a specific tool to measure the individual academic performance of students and schools, which could be later used to assess the effect of PoP's intervention on key outcomes such as students' learning gains measured through data that speaks about this dimension, e.g., results of standardized tests or other types of academic assessment.

Additionally, PoP's initial tool for measuring the impact, the Teacher Observation Guide (TOG), has been discontinued due to various factors such as COVID-related disruptions, teacher resistance to constant monitoring, observation bias, and inconsistent data collection. PoP has since shifted to using the Modified Early Grade Reading Assessment (MEGRA), which primarily measures improved literacy among students, and not the impact of PoP's work on school leaders. Although PoP has recognized the need to improve their measurement tools to assess the effectiveness of their programs on student outcomes and the development of school leaders, they are currently seeking new ways to address this gap.

In the above recommendations, we suggested utilizing cluster journals as a tool for school leaders to track new learning strategies. However, this tool can also serve a dual purpose by involving teachers and PoP staff. By having teachers include students' work or write their reflections in the cluster journal, it can help PoP staff members assess if the information presented is being retained and used effectively in the classroom. This allows for greater accountability for teachers, while also providing PoP with insights into the challenges that instructors face when implementing new strategies. These insights can be used to develop additional resources and support for teachers to help them overcome these challenges and improve student outcomes.

4.3. Methodological limitations

This subsection presents methodological issues and limitations that the SIPA team faced while conducting its work during the course of the Project.

Limited sample sizes. Firstly, the limited sample size of the surveys conducted throughout the Project offers a brief snapshot of the beliefs and interests of key stakeholders. While the SIPA team did collect 35 responses from teachers, which satisfies the requirements for statistically significant results, a larger

sample size would be preferable for greater representativeness (Turney, 2022). Limited sample sizes are an issue for the work conducted with principals and school supervisors. However, while only five supervisors were surveyed, these individuals oversee 40-50 schools each, making their assessment of school principals and their practices conclusive.

Self-reported information. Secondly, the self-reported proficiency levels of principals in the 14 topic areas listed may be biased towards higher ratings. To address this limitation, we suggest using a double reporting method where teachers are also asked to report on the performance of their principals.

Phrasing of survey questions. Thirdly, the phrasing of some survey questions may have been too complicated for respondents, potentially affecting the reliability of their responses. More qualitative data could also have provided valuable background information and context into the reasoning behind the survey answers, but time constraints limited the SIPA team's ability to conduct additional interviews.

Questions on sustainability of learnings. Fourthly, the sustainability criterion within the feasibility framework is subjective since it is assessed by PoP and supervisors. The information collected via these questions may be biased, as the source of information is self-reported and based on the perception teachers and principals have regarding the likelihood of something that has not yet occurred (i.e., the likelihood that principals will apply the learnings on the topics once trained on them).

Limitations of observational analysis. The observation exercise was limited due to some schools being not in active teaching activities, which hindered the SIPA team's ability to observe interactions between principals, teachers, and students. Additionally, observational research is limited, as there is only a handful of aspects about the school that can be observed. Other aspects relevant to the framework may not be prone to be identified through observational exercises.

Application of literature review findings. The list of 14 topics and actions presented at the beginning of section 2 is a summary of the main and most common findings cited in Deliverable 2, but does not include every single action referred to in that document. It is highly recommended that PoP use Deliverable 2 as a tool to identify additional, less recurrent, actions cited in the document that they might consider relevant.

5. POTENTIAL AVENUES FOR FUTURE WORK

This report presents recommendations on topics, actions and strategies for principals' trainings. In many ways, the contributions made through the work presented here refer to "what" the trainings should address. **However, it is important to acknowledge that teaching skills in leadership, management, and community engagement, which can fit into the realm of what is commonly referred to as "soft skills" or "non-cognitive skills", may require a different pedagogical approach.**

The SIPA team encourages both PoP and the Workshop in Sustainable Development direction to consider a future project that specifically addresses the issue of what are the best pedagogical strategies to conduct trainings designed to address the topics prioritized in this report. If a future project with SIPA is not possible, the team recommends PoP to complement the deliverables of this Project with an in-house exercise to explore the best and most suitable pedagogical approaches to train principals in these skills. By combining the findings and recommendations presented here with an assessment of such pedagogical approaches, the SIPA team believes that PoP can arrive at much more comprehensive and impactful trainings.

**ANNEX: DELIVERABLE 2: CONCEPTUAL MAPPING OF THE IMPORTANCE OF
LEADERSHIP, MANAGEMENT, AND COMMUNITY ENGAGEMENT SKILLS IN
ACHIEVING BETTER SCHOOL AND STUDENT OUTCOMES**

Workshop in Sustainable Development Practice 2022-23

“Programmatic Design of Activities to Support School Principals in Leadership, School Management and Community Engagement in Guatemala”

Client organization: Pencils of Promise

DELIVERABLE 2: CONCEPTUAL MAPPING OF THE IMPORTANCE OF LEADERSHIP, MANAGEMENT, AND COMMUNITY ENGAGEMENT SKILLS IN ACHIEVING BETTER SCHOOL AND STUDENT OUTCOMES

March 10, 2023

Team Members: Xiaoyang Chen, Mary Long, Jorge Ramon-Salas, Jovany Romero

I. INTRODUCTION

The Workshop in Sustainable Development (hereinafter referred to as “the Project”) conducted for Pencils of Promise (PoP) aims at providing recommendations on the content and format of trainings on the topics of leadership, school management, and community engagement for school principals in rural communities of Guatemala. To achieve said goal, the Columbia University’s School of International and Public Affairs (SIPA) team was tasked to initiate its work by analyzing, from a conceptual perspective, if and how skills related to leadership, management, and community engagement affect school and student outcomes.

To that end, this deliverable explores existing literature to map the relation between the aforementioned skills and improved school and student outcomes. This report concludes that there is indeed a positive relation and, consequently, argues in favor of trainings for school principals designed to cultivate and strengthen leadership, management, and community engagement skills as a valuable tool to improve school and student outcomes. A mounting body of evidence is showing that effective training and professional development of school principals, directed towards building exemplary leadership, are associated with improved school and school outcomes (Darling-Hammond et al., 2022). In fact, literature provides evidence indicating that “It is difficult to envision an investment with a higher ceiling on its potential return than a successful effort to improve principal leadership” (Grissom et al., 2021, p. 43).

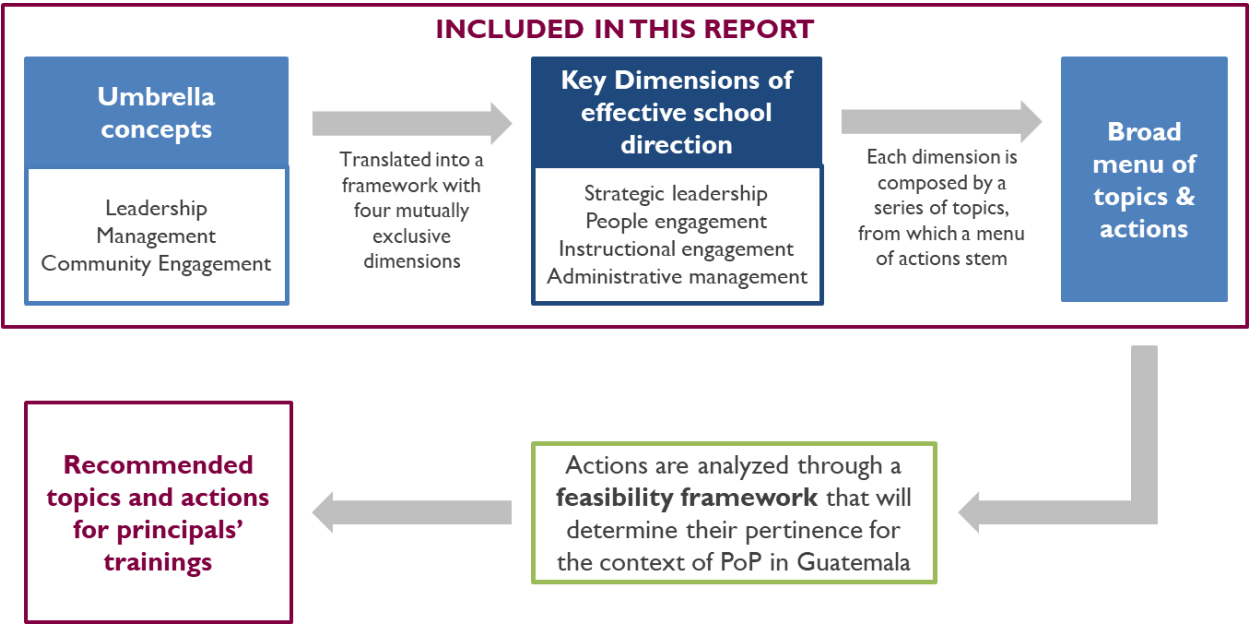
I.1. Scope and structure of this deliverable

To achieve its main objective, this document first defines the umbrella concepts of leadership, management, and community engagement. Given their broad nature, these umbrella concepts are subsequently dissected into a framework with four separate dimensions specifically tailored to the education sector: (i) strategic leadership, (ii) people engagement, (iii) instructional engagement, and (iv) administrative management. These dimensions allow for a more nuanced exposition of the specific topics that potential trainings for principals could address and that speak directly to the relation between effective school direction and improved school and student outcomes.

Finally, the document discusses some of the actions, documented in the existing literature, that schools and their principals have conducted in each of the four dimensions of school management and leadership. In subsequent stages of the Project, this literature review will be translated into concrete action recommendations for principals’ trainings, tailored to the specific context in which PoP operates in Guatemala. **Consequently, this report does not aim to provide specific recommendations on items to include in the principals’ trainings. This will be the purpose of the final Project report. This document, rather, documents existing literature on the matter.**

The content of this document draws from literature on the impact of principals’ behavior and leadership and management skills on their schools and their students, and it brings a wide array of experiences from diverse contexts, including experiences in the United States, Brazil, India, Mexico, Chile, Canada, Italy, among other countries. Conceptual foundations on leadership and management derive from top-tier authors and publications on these fields, including readings of mandatory consultation in Columbia SIPA’s Leadership Specialization¹.

This document serves two additional purposes. On the one hand, it establishes the conceptual base for subsequent stages of the Project. As stated above, the literature review contained in this document provides the team with a menu of leadership and management-related dimensions, topics, and specific actions to promote improvements in school and student outcomes via effective school direction. The next stage of the Project will be to assess the feasibility of these actions in Guatemala to arrive at a curated, contextualized list of actions to be incorporated in potential principals’ trainings—this is the main purpose of the team’s second trip to Guatemala. The following diagram visualizes the concepts and Projects stages described above.



On the other hand, this document serves the purpose of pointing out the limitations of the existing literature in defining the mechanisms through which a causal relation between principals’ behavior and school and student outcomes materializes. In other words, even though literature regarding the positive

¹ <https://www.sipa.columbia.edu/sipa-education/masters-programs/specializations/leadership-innovation-and-design>

correlation of leadership and management traits of school principals is extensive, the mechanisms that support a causal relation have not yet been addressed (Liebowitz & Porter, 2019). Additional limitations exist regarding the applicability of recommendations on this issue. Given the complexity of school environments and the wide diversity of contexts in which schools operate, there is no one single checklist of practices or model that can be universally applied to improve school and student outcomes via improvements in school leadership and management (Gois, 2020).

In addition to this introduction, this document is structured as follows. Section 2 provides a definition of the umbrella terms of leadership, management, and community engagement. Section 3 presents an overview of the four dimensions through which principals impact school and student outcomes: (i) strategic leadership, (ii) people engagement, (iii) instructional engagement, and (iv) administrative management, and subsequently delves into each of these four dimensions to provide a detailed explanation of each of the topics that compose them. Section 4 follows by proposing a menu of actions to promote improvements in each of the four dimensions. This constitutes the menu of actions that will later be assessed through a framework to determine their feasibility in the Guatemalan context. Section 5 concludes by presenting the framework through which the feasibility assessment will be conducted.

2. CONCEPTUAL FRAMEWORK: LEADERSHIP, MANAGEMENT, AND COMMUNITY ENGAGEMENT

The Terms of Reference of the Project refer to the umbrella concepts of leadership, management, and community engagement as the main themes of the trainings for school principals. These concepts are broad and are not mutually exclusive. This section makes an effort to broadly define these key concepts as a first step in setting the conceptual foundations that inform the Project. The definitions contained in this section, however, will provide useful in later stages of the Project that address specific actions for principals' trainings.

2.1. Leadership

Leadership is broadly defined in western academic environments as a **“process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task.”** (Chemers, 1997). This definition of leadership speaks to the broad nature of the concept. Yet, the ability to achieve a predefined task or objective via collaboration with others is a recurring theme. The means through which this process of accomplishing goals with or through others occurs, is what gives leadership its elusive characteristic.

According to Kotter (2001), **leadership is a system of actions** that involve:

1. Deciding what the task at hand is, in other words, establishing an agenda
2. Developing the capacity to accomplish the agenda by establishing the relationships and networks of people tasked with conducting the agenda
3. Ensuring every stakeholder is doing the job expected from them to accomplish the agenda

Even though Kotter (2011) defines management in the same way (see section 2.2), he points out that the mechanisms through which leadership and management operate are markedly different. **The main function of leadership is to produce change.** Hence, leading any type of organization starts with **setting a strategic direction or vision** for that change, this is how leaders establish an agenda. A vision,

as seen in subsequent sections, is usually long-term oriented. Subsequently, leaders build the capacity to accomplish the agenda by **aligning people**, which involves an effort to clearly communicate the vision and get people committed to its achievement. Lastly, leaders make sure every stakeholder is adequately performing their job by **motivating and inspiring** their teams.

Following this definition, effective leadership is a process that involves defining what change looks like, communicating effectively to achieve full and truthful commitment to change, and appropriately harnessing people's feelings and emotions to motivate and inspire.

2.1.1. Defining what change looks like

This first key step of the leadership action system involves defining three core aspects of any organization, no matter its size: **mission, vision, and values**. Most discussions on these concepts tend to degenerate into the mysterious due to a false belief that mission, vision, and values ought to be elevated, extremely innovative, or brilliantly crafted concepts. They do not (Kotter, 2011). Yet, mission, vision and values are core to any organization as they set the purpose and the principles that ought to guide all organizational decisions (Coleman, 2013). This subsection provides a general definition of these concepts in simple terms to facilitate their understanding and application.

Mission, on the one hand, is nothing more than the purpose of the organization. In general terms, the mission answers the questions of what the organization does, for whom it does it, and what it aims to accomplish for those whom receive the service or product (Bagley, 2022). In line with this definition, a mission statement for a school could go something like this: *“School X provides high-quality instruction to boys and girls between the ages of 8 to 12 to make them to make them active participants in society”*.

Vision, as a core leadership concept, articulates the change that is expected to happen. It should not be confused with planning, which is a management concept (Kotter, 2011). In a similar tone to the mission, but going one step beyond, the vision answers the questions of what does success look like for the organization and how would the world be different if that success is achieved. This, in turn, speaks about what makes the organization unique (Bagley, 2022). Following on the example provided in the previous paragraph, the vision of a school could go like this *“School X students and alumni contribute to their community by becoming ambassadors of peace, critical thinkers, and passionate learners”*.

Values articulate the behavioral guidelines and mindsets needed to achieve the vision and, therefore, become the lens through which all company actions happen (Lencioni, 2002; Coleman, 2013). When properly practiced, values should limit the organization's strategy and operational freedom, as well as the behavior of its people. Otherwise, value simply become empty and meaningless statements that do not serve their real purpose (Lencioni, 2002).

2.1.2. Aligning people

In order to achieve the vision, leaders require the truthful commitment of their teams. Unlike staffing, aligning people is, **inherently, a communications effort** that extends to all the organization as every single person contributes to achieving the vision. Aligning people starts with clearly communicating what the mission, vision, and values are (Kotter, 2011).

The base of all effective communication was established by Aristotle in his work “Rhetoric”. His four modes of persuasion, i.e., Ethos, Pathos, Logos, and Kairos, are still the gold standard for persuasive communication (Bianchi, 2018). The four modes of persuasion are described below.

Ethos refers to the credibility of the communicator and can be seen as the main door to persuasion. Even the most powerful message can be ineffective if the communicator has not built the credibility to make others listen attentively and believe his/her words. Aspects such as the communicators reputation as trust worthy and integrity-oriented, the communicators experience or track record, and the communicators overall leadership affect credibility (Kotter, 2011). In other words, credibility does not stem from the sole fact of having power or authority through a high-level position, credibility is earned via good leadership (Sinek, 2014).

Pathos refers to the ability of the communicator and the message to appeal to the audience’s emotions. Using stories is a powerful way to achieve this. For example, the communicator can actively share personal experiences that drove his or her career decisions.

Logos is the ability to persuade through appealing to the audience’s reason and logic. Supporting one’s message with trusted external sources, numbers and data, as well as presenting evidence in an ordered manner, are all ways of using reasoning as a mode of persuasion. Finally,

Kairos refers to proper use place and timing. Some messages may be more effective when communicated outside official settings, some may be more so when communicated at the beginning of the day. Knowing where and when to communicate is essential to persuasive communication.

2.1.3. Motivating and inspiring

The final pillar of leadership is to motivate and inspire. While defining change sets the direction, aligning gets people committed, motivating and inspiring guarantees that people are energized by **satisfying basic emotional human needs** such as a sense of recognition, belonging, achievement, empowerment, and self-esteem (Kotter, 2011). In line with this, Goleman et al. (2013) establishes that effective leadership works through emotions. Hence, if leaders fail at driving their team’s emotions in the right direction, goals may never be achieved in the way they are intended to be achieved. The author goes even further by concluding that leaders serve as a group’s emotional guide, therefore, for better or worse, followers will generally look to the leader for empathy and emotional support.

Sinek (2014) concludes that great leaders are those who make others feel secure and part of a circle of trust. Hence, successful work environments are defined by **trust and cooperation**. The author, in turn, clarifies that trust and cooperation are emotions, and therefore, cannot be instructed. However, they can be generated when the leader sets the tone by making people feel safe and protected, which can be achieved by providing people with opportunities and support to try and fail, building their self-confidence, and by making an active choice to put the safety and the lives of people in the organization first. On a similar note, Kotter (2011) states that providing feedback, coaching, and role modelling are all effective ways to build self-esteem and motivation.

Finally, McGregor & Doshi (2015) propose a framework on the positive and negative drivers of motivation. On the positive side, the authors argue that people are positively motivated (i) in an environment where they perform a task they **inherently enjoy** and in which they can learn, (ii) when they **value the work’s**

impact, and (iii) when the work enhances their potential or provides **growth opportunities**. On the negative side, the authors site (i) emotional pressure from an external source such as fear, peer pressure, and shame, (ii) economic pressure, and (iii) inertia or a state in which routine is the main driver of work and the individual is no longer able to explain why they work.

2.2. Management

Management is a more tangible concept. **The main function of management is to cope with complexity and produce orderly results—not change—by bringing order and consistency** (Kotter, 2011). As stated above, management is also defined as a **system of action** that involves deciding what the task at hand is, developing the capacity to accomplish the agenda, and ensuring every stakeholder is doing the job expected from them to accomplish the agenda. However, unlike leadership, management accomplishes these through different means.

In line with this, in management is an action system to produce orderly results in which deciding what the task at hand is happens through planning and budgeting, developing capacities happens through organizing and staffing, and ensuring that every stakeholder is doing the job happens through controlling and problem solving.

2.2.1. Planning and budgeting

Planning is the process of defining an orderly set of actions that must be accomplished in a specific timeframe. The specific resources needed to conduct each action are defined through budgeting. Planning is inherently a management process and it is deductive in nature, meaning it begins with a general idea (i.e., the vision) and progresses to specific conclusions (i.e., steps or actions). Hence, planning is a complement to the strategic concepts of mission and vision (Kotter, 2011). Planning, unlike the mission and vision, is a fluid concept that adapts with changing circumstances, therefore, planning ought to apply to the short to medium term.

To better understand this concept, let us use the example of vision presented above: “*School X students and alumni contribute to their community by becoming ambassadors of peace, critical thinkers, and passionate learners*”. The vision of the school hardly changes, but the specific circumstances in which the school operates can change. Therefore, the planning and budgeting process made for a year in which resources are abundant, for example, may not be the same for a year in which resources are more limited. Yet, **planning is always informed by the vision, the mission, and the values** of the organization. If no strategic direction or vision is established, priorities cannot be clearly established and organizations risk spending enormous amounts of time and resources in eternal contingency planning (Ibid.).

2.2.2. Organizing and staffing

In order to execute plans in a precise, orderly, and efficient way, managers resort to organization and staffing. **Organizing and staffing is the process of defining the organizational architecture and choosing the right people, with the right skills, to conduct each action established in a particular plan, and making sure the plan is understood by all** (Kotter, 2011). Unlike aligning, organizing and staffing are not conducive to truthful commitment, nor they intend this outcome. While an individual can clearly understand a plan, that does not mean the individual is committed to the plan.

Much like the different parts of a clock, organizing and staffing provide an organization with the correct gear; they are processes by which the correct pieces are placed in the right place for the clock to work. Aligning though, as seen in the previous subsection, deals with the human aspect of this gear.

Defining the correct organizational architecture is a complex process that involves a series of key managerial decisions, among which the most important include (Bodner, 2019; Kotter, 2011):

- How does the organizational map look like?
- What are the specific jobs required for plan accomplishment?
- What are the qualifications needed for each job?
- Who reports to whom?
- How much authority is delegated to each person?
- How many separate groups, teams, areas should exist?

2.2.3. Controlling and problem solving

The third stage of the management process, and probably the most famous, is controlling and problem solving. **Managers make sure people follow the plan and do their job by monitoring results versus the plan and taking corrective measures when needed** (Kotter, 2011).

Prioritizing tasks and keeping teams on track through regular check-ins and milestone setting, are all key aspects of effective controlling and problem solving. Smart managers are not only proficient in prioritizing tasks, but at striking the right balance between overseeing plan accomplishment and focusing on day-to-day activities. For example, a manager may require weekly reports on activity completion or assess quarterly performance indicators. This depends on the size and nature of the plan and the people involved (Bodner, 2019).

According to Kotter (2011), this managerial process should be **risk free and as close to fail-safe as possible**. This means that, in theory, controlling and problem solving do not deal with the unusual or the hard to obtain and, unlike leadership, do not deal with motivation or inspiration issues. As Kotter (2011) points out, the whole purpose of managerial processes is to “help normal people who behave in normal ways to complete their routine jobs successfully, day after day.” For instance, making sure that teachers have the means to attend to school every day, or ensuring that education materials are present in the classrooms, are matters that pertain to controlling and problem solving.

2.3. Community engagement

At first glance, community engagement is understood and reduced to the direct involvement of family in the educational functions of students. Research has shown that the benefits from parental involvement in schools are directly correlated with having a positive effect on educational learning outcomes for children (Young & Warren, 2003). Yet, as part of the SIPA team’s efforts to define community engagement, the umbrella concept must be extended beyond parental involvement in schools. Marvis Sanders at John Hopkins University defines the term to include those meaningful interactions between the school and “individuals, businesses, and formal and informal organizations and institutions in a community”, driven by a common goal of improving school outcomes (Sanders, 2003).

Those meaningful partnerships created within the community are supported as they serve to provide students with access to an increase in academic resources and learning opportunities, both inside and outside of the school setting (Hands, 2005). As a result, those close relationships between a school and its personnel and that of any of the aforementioned community entities facilitate achieving the desired common goal of improving student outcomes through community partnerships that, in turn, may lead to creating sustainable changes.

Furthermore, since this report refers to Guatemala's indigenous and rural schools, the umbrella concept of community engagement needs to be further expounded into a holistic and practical definition. This will serve as a crucial feature in defining community engagement within the context of indigenous communities in Guatemala to foster greater trust and stronger partnerships. It is the case that oftentimes outsiders have failed to observe the specific customary protocols in indigenous communities that are distinctly ascribed to them due to the nature of the unique composition of their community, culture, or location (Minoi et al., 2019), which can prove to be detrimental in the contextual relationship of community engagement. Following this logic, it is then imperative that within Guatemala's indigenous communities in the educational matters, in defining community engagement there needs to be a cultural and political element included, one that is rooted in "incorporating indigenous knowledges and practices into the development of indigenous community engagement" (Smith et al., 2017).

Therefore, when referring to community actors within the context of community engagement in the educational sector, this report refers to those who "identify with their Country/Place, their kin and culture, and who hold a relationship, social identity and commitment to them" (Lowe et al., 2019). ***In other words, community engagement is specifically referring to those community entities who hold a personal stake in the community through shared culture, identity, or commitment as is the case in the context of schools in Guatemalan communities.***

The importance of incorporating a cultural component into the definition of community engagement stems from the idea that community participation is voluntary, but communities with a shared culture, identity, or commitment can be leveraged to promote and strengthen community engagement partnerships.

3. KEY DIMENSIONS OF SCHOOL MANAGEMENT AND LEADERSHIP

As stated in the introduction, the umbrella concepts of leadership, management, and community engagement are broad and, when applied to the education sector, may not be mutually exclusive and collectively exhaustive. For example, community engagement may relate to the leadership acts of aligning, motivating, and inspiring people. It may also be part of the strategic vision of a school in a setting where the community has strong influence. Additionally, specific aspects that pertain to the education context, such as curriculum development, do not immediately fit in one of the three umbrella concepts. Finally, in settings such as that of Guatemala, certain day-to-day management tasks like ensuring teachers attend to school or that learning materials are available, may require leadership acts to be achieved.

Considering the arguments presented above, **this section provides a framework with four mutually exclusive dimensions through which effective school direction guarantees improved school and student outcomes: (i) strategic leadership, (ii) people engagement, (iii) instructional engagement, and (iv) administrative management.**

1. **Strategic leadership** refers to the set of skills needed to establish the direction and defining how change looks like for the school, as well as aligning all key stakeholders relevant to the school's context. This dimension incorporates the topics of setting a vision, values, high-level objectives, and guaranteeing effective stakeholder engagement (including community engagement).
2. **People engagement** refers to the set of leadership skills needed to motivate and inspire people. This dimension pertains particularly to the relation between school principals and teachers, with the latter group being the one in closest contact with the principals and the main provider of education services to students. This dimension incorporates the topics of building trust-based and cooperative relations, feedback and professional development, open communication, and empowerment.
3. **Instructional engagement** refers to the set of management skills needed for pertinent and high-quality instruction. This dimension incorporates the topics of curriculum development, monitoring and evaluation of school outcomes, involvement in teachers' training and teacher-to-teacher collaboration.
4. **Administrative management** refers to the set of management skills needed to guarantee the correct functioning of the school and the timely provision of education services. This dimension incorporates the topics of resource allocation (including human resources) and financial management.

The sub-sections below present the existing literature on the relation between each dimension and improved school and student outcomes.

3.1. Strategic leadership

This subsection explores the literature on the relation between strategic leadership traits of school principals and school and student outcomes.

3.1.1. Mission and vision

In a comprehensive meta study on the determinants of effective school direction (i.e., direction that is conducive to achieving improved school and student outcomes) conducted in Brazil, Mexico, Chile, Canada, Singapore and the United States, Gois (2020) concludes that one of the first actions implemented by successful school principals is setting the mission and vision and subsequently observing and reminding them to all school stakeholders. According to the author, successful principals constantly question whether a given proposal (pedagogical or not) is consistent with the mission and vision.

On a similar note, Coleman (2013) states that articulating a mission and vision will orient every decision that stakeholders involved in the school make, as it describes the school's end goal. By setting a clear outline of the overarching priorities of the school, constructing this shared sense of purpose motivates stakeholders to take oriented action toward those goals and stay committed to developing students to reach their full potential (Darling-Hammond et al., 2022). Principals must be capable of following and constantly communicating the school's mission and vision and make sure that actions taken by school stakeholders are aligned with these concepts. This aspect is key to improved outcomes. Many leaders do not inculcate discipline in their organizations to use the mission and vision as guiding tools and principles to make decisions. Successful organizations invariably do so (Pandolfi, 2011).

Leithwood and Jantzi (2005) emphasize that effective school leaders collaborate with their peers to establish a school's strategic direction, vision, and objectives. Research supports that clarity regarding a school's vision within a given school setting contributes to more positive student outcomes (Darling-

Hammond et al., 2007). Determining a vision is a crucial component in setting a school up for success as it lays the foundation of the school's purpose, it clearly answers the question of why the school exists, and it serves as a guiding principle to set the direction towards which the school should move (Pandolfi, 2011).

Finally, when constituting the mission, successful organizations often draft a mission statement. Strong mission statements are short and memorable and will be applicable to all stakeholders involved in the organization.

3.1.2. Values

Values are another essential component within the strategic leadership dimension, as an institution's core values are heavily intertwined with a school's vision. While a vision describes a company's purpose, values guide the behaviors and mindsets of individuals needed to achieve that vision (Coleman, 2013). Thus, core values are another critical asset in setting the school's foundation. Core values are ingrained principles deemed necessary by the school and its constituents that help to establish the type of environment teachers and principals strive to create for their students (Lencioni, 2002).

Values will vary among schools as the leadership and competencies within a school will differ based on their region, setting, cultural context, and more. Contextualizing the values of a school to its culture and region will create a culture best suited to the needs, attitudes, and beliefs of the students within that school. By identifying the central values that a school chooses to incorporate in its plan, leaders can be more effective in modeling behaviors that exemplify those values in hopes that their peers can adopt similar behavior patterns (Pont et al., 2008). Moreover, building a positive culture through instilling good values throughout the organization will help amplify motivation and improve school effectiveness and productivity (Peterson & Deal, 2009).

3.1.3. Objectives

Objectives are goals that the organization hopes to accomplish. Gois (2020) establishes that building common objectives is the first trait of effective school principals. The author stresses the importance of establishing with all school stakeholders, what are the common objectives to be achieved by all. He adds that constant monitoring is necessary to guarantee that objectives do not remain only on paper.

In the education context, developing learning objectives is essential to a school as the learning outcomes must align with national curriculum requirements and can help monitor progress or a student's academic performance and, if required, adjust a school's performance and strategy (Pont et al., 2008). Moreover, creating objectives helps keep schools accountable in measuring their students' achievements and ensuring the school continues to have effective management practices that can benefit both teachers and students. Gois (2020) qualifies this discussion by adding that improved learning outcomes are linked to objectives when school principals frame objectives in a culture of high expectations for everyone. This framing allows schools, especially those in underserved communities, to avoid the self-fulfilling prophecy in which low expectations of teachers regarding their students influence students' performance. This also applies to the relation between principals and teachers. The central idea lies in deconstructing mentalities according to which students are not able to perform well or will not be able to overcome socioeconomic barriers throughout their lives.

3.1.4. Community and stakeholder engagement

Lastly, community and overall stakeholder engagement are additional critical components of strategic leadership, as the larger community plays a role in a student's academic achievement (Fullan, 2001). In his cross-country study, Gois (2020) finds that strengthening ties with families and with the school's community is an element identified as a characteristic of successful schools. In fact, the absence of ties between school professionals, families and the local community is identified as a bottleneck to improved results, given that when ties do occur, there are positive impacts on student participation, on the school climate and, consequently, on the learning. Effective community engagement also allows school principals to be aware of the local culture and customs and internalize said culture into the school's actions. Lastly, it can also serve as a way to guarantee continuity and retention of both principals and teachers when continuity is determined by an external actor, such as the education authority.

As stated above, an organization can only function efficiently if it has people who are committed to the vision, share the same core values as the school, and are willing to embrace them (Coleman, 2013). School leaders also serve as leaders in their communities and help strengthen the ties between the students and the actors in the community with whom they interact. As school principals engage with local businesses, faith-based groups, and other local organizations, they can better integrate their academic work within the school into other areas relevant to a student's environment (PricewaterhouseCoopers, 2007).

3.2. People engagement

This subsection explores the literature on the relation between people engagement traits of school principals and school and student outcomes.

3.2.1. Trust-based and cooperative relations

According to Gois (2020), the establishment of relationships of trust in the school is such an important dimension that it could be considered a fundamental strategy to achieve any objective. Without it, even proven effective actions—such as giving feedback on teachers' work (see below)—are compromised. With it, even initiatives with a high potential for conflict can be accepted by the school community. Consequently, this dimension is absolutely necessary for any other actions to be successful.

Trust also reduces friction within the school staff. If there is trust between teachers and principals, the school is more likely to progress towards its goals; both principals and teachers will have to spend less time on trivial activities such as planning and attending to messages or details, and dedicating more time to actions that go towards organizational improvements (Tschannen-Moran, 2004).

Evidence has revealed that trust is a central component of leadership. Bryk and Schneider (2002) find that trust in the school principal is correlated with student achievement. This correlation is in turned explained by the effect of creating healthy environments (Hoy et al., 1992), improving teacher morale (Black, 2001), and building effective leader-follower relationships (Podsakoff et al., 1990).

Indicators of trust include:

- Competence: Setting the standards and working hard towards positive results. The ability to handle difficult situations, be flexible, and engage in problem-solving (Tschannen-Moran, 2004).

- Consistency and reliability: Demonstrating commitment and diligence towards one's work. If an individual shows that they are reliable, timely, and consistent with their work, it reduces uncertainty and leads to greater trust (Mayer et al., 1995).
- Respect: Recognizing and appreciating the various individuals involved who have contributed to improving students' education.
- Integrity: Morals and ethics will drive the decisions and actions stakeholders make to advance the best interests of students (Bryk and Schneider, 2002).

It is important to recognize, however, that especially in more challenging contexts and areas where resources are scarce, the effort to build a trust-based and cooperative school climate will demand more from principals. When, for example, principals have to worry about items as basic as having bathrooms in minimally dignified conditions, priorities get reorganized. Therefore, more support should be provided to school principals in order to build trust-based and cooperative environments (Gois, 2020).

3.2.2. Feedback and professional development

There is no doubt about the impact a principal has on the students at their school. But it tends to be much more indirect, as teachers are the professionals who have the most contact with students. The concern to support teachers, develop them and help them to do a better job, therefore, is another characteristic identified by studies as one of the most important in school leadership (Gois, 2020). Furthermore, professional development is not restricted to teachers in their task of teaching students. Schools should to be learning communities for all actors involved, not only students. Cultivating leadership to perform other key tasks such as community engagement is one key example of this (Ibid.).

Feedback and professional development entail that principals cultivate the growth of their instructors by providing them with notes on how to improve their performance for better student outcomes. Principals are more likely to retain staff members by strengthening their capacities through professional development opportunities and coaching (Attendance Works, 2017). Research has shown that the ability to provide feedback and coaching for existing teachers is one factor that leads to higher-quality instruction for students and in building a solid school climate (Sebastian & Allensworth, 2012).

3.2.3. Empowerment

Empowerment, in essence, becomes the act of sharing leadership. Leaders who regularly involve people in decision-making, support employees' efforts that contribute to the vision, and purposefully delegate, provide their teams with a sense of control, accomplishment, and belonging (Kotter, 2011).

In school settings, empowerment refers to equipping teachers to feel competent and qualified in their roles while providing positive reinforcement. Literature has found that principals who can create positive, empowering environments tend to better motivate teachers to stay employed in their schools (Grissom, 2011). A key characteristic of schools that manage to obtain better outcomes in the long term is not centralizing decisions in one person (Gois, 2020). Participatory decision-making structures, for instance, promote intellectual stimulation and set high performance expectations for teachers and students. These are understood to be strong indicators of organizational learning as they have been linked to teacher motivation and empowerment (Darling-Hammond et al., 2007).

When principals share control, confidence in the other party carrying out their duties to a high degree increases (Lapidot et al., 2007). Thus, sharing of influence is a strategy to empower instructors as it allows multiple individuals to initiate changes to plans and goals, which fosters a more collaborative environment. Finally, when empowerment happens in a harmonious way, the principal's work is facilitated, and the school becomes less dependent on their figure (Gois, 2020).

3.2.4. Open communication

Communication is another critical topic within the dimension of people engagement. Teachers find emotional, environmental, and instructional support a central factor in whether they wish to continue teaching at a specific school (Hughes, Matt, O'Reilly, 2014). Open communication is a two-way channel. One channel is for principals to ensure that they directly communicate all updates, school events, notices, etc., to their teachers. The other channel is for teachers to feel supported and head to their principal to voice their concerns and get the support they need. Communication is the primary staple in improving support and building a positive culture (Hughes et al., 2014).

3.3. Instructional engagement

This subsection explores the literature on the relation between instructional engagement traits of school principals and school and student outcomes.

As a general theme, principals should engage in instructional engagement to influence school and student results for several reasons addressed below. According to Robinson et al. (2008), principals actively involved in instructional leadership are likely to have schools with more outstanding student outcomes. When principals actively participate in instructional engagement, they convey to teachers, students, and parents that teaching and learning are paramount.

3.3.1. Monitoring and evaluation of school and student outcomes

Monitoring and evaluating school outcomes allows principals to discover and address improvement areas. Monitoring is the constant and methodical examination and observation of a program or initiative. The evaluation assesses, appraises, or determines a program's worth, value, and quality. It entails comparing the current situation to the past to determine the extent to which the set objectives have been met (Handbook for inspection of educational institutions, 2000). Principals can give focused support to teachers and students once areas for improvement have been identified.

According to Williams (2000), the principal monitors and evaluates the school to ensure good teaching and learning occur. Research has shown that school principals at higher-performing schools differ from their counterparts in lower-performing schools. In high-performing schools, principals are personally involved in planning, organizing, and assessing instruction and instructors. Principals' participation level in classroom observation and subsequent feedback is positively linked to school student performance (Robinson et al., 2008). Teachers at high-performing schools state that their principals conduct regular classroom inspections, which assists them in improving their instruction (Bamburg & Andrews, 1991; Heck, 1992; Heck et al., 1990).

Furthermore, principals play critical roles in the effectiveness of teachers' evaluation through in-classroom observation. Evaluation methods promote teacher feedback by providing a standard structure and vocabulary for principals and teachers to discuss instruction (Kraft & Gilmour, 2016). Based on their

observations in the classroom, principals can give objective feedback to instructors. Principals can assist instructors in identifying areas for development and developing ways to increase their instructional effectiveness by watching teachers' teaching practices and offering feedback based on particular criteria.

Garet et al. (2017) demonstrate that principal feedback to teachers enhances classroom practice, which is connected with later gains in students' math and reading test results. The Chicago Public Schools' Excellence in Teaching Project provides experimental evidence of the usefulness of systems that evaluate individual teachers' instructional effectiveness, demonstrating that an elementary teacher evaluation program involving classroom inspections and organized principal-teacher conversation resulted in reading achievement improvements of 0.10 standard deviations (Steinberg & Sartain, 2015).

3.3.2. Curriculum development

School principals could also impact student outcomes by engaging in curriculum development. Student outcomes would be more positively impacted by preservice preparation programs, pipeline efforts, and in-service learning opportunities for principals that involve instructional-focused teacher interactions (Grissom, Egalite & Lindsay, 2021). Several studies demonstrate how principals collaborate with instructors to find alternate instructional techniques, such as culturally responsive teaching to address the learning requirements of marginalized students (Danridge et al., 2000; Ylimaki et al., 2012). Another example of principals involved in curriculum development from Theoharis & O'Toole (2011) is that principals build novel frameworks for student learning, such as satisfying the requirements of English learners by combining general education and ESL instructors. Principals participating in curriculum development may ensure teachers have the resources and the proper support to offer high-quality instruction to students, leading to better student outcomes.

Successful principals would increase accomplishment and raise student outcomes by concentrating on instructional quality (Edition, 2013). Principals who collaborate with teachers to develop a feeling of shared accountability for students' learning (Sanzo et al., 2011) and who get involved directly to support teachers' collaborative work in their instructional teams (Charner-Laird et al., 2017), play a critical role in improving student outcomes. Principals at high-performing schools are actively involved in collegial discussions on instructional issues, such as how instruction affects student progress (Heck et al., 1991).

Furthermore, high-performing school principals are characterized by active monitoring and coordination of educational programs. High-performing school principals and teachers collaborate to analyze and improve teaching, an approach encapsulated by shared instructional leadership (Heck et al., 1990; Heck et al., 1991; Marks & Printy, 2003). Robinson et al (2008) concludes that school leaders are more intimately involved in curriculum design and implementation across year levels in high-performing schools than in low-performing ones.

Principals who engage in effective curriculum development should consider not only the teachers and students but also the parents and greater communities. The curriculum can benefit from the significant contribution of parents and community members. They can provide perceptions on what is crucial for students to learn and how the curriculum might be modified to fit community requirements and be meaningful to the community. Reyes and Garcia (2014) provide specific illustrations of how influential school leaders may recognize a community's culture, language, and customs while improving student results.

Gordon and Louis (2009) show how student academic success is more remarkable in schools where instructors report higher parent participation. Meanwhile, Mukuria (2002) finds a correlation between substantial parental involvement and fewer student suspensions for disciplinary offenses. Klar and Brewer (2013) emphasize the importance of school leaders' context awareness and flexibility to modify their leadership techniques to fit their community setting. The data demonstrate how much each school's immediate situation was considered in the leadership practices and attitudes that affected student progress there. Principals may contribute to building a stronger, more cohesive community that supports students' academic achievement by incorporating the community into the curriculum development process.

3.3.3. Involvement in teachers' training and promotion of teacher-to-teacher collaboration

To enhance student results, principals can provide teachers with the tools and chances to pursue new educational possibilities through instructional-focused professional development. A school learning community can only be successful with the principal's leadership in teacher professional development (Bredeson, 2016). Emphasizing teacher professional development is necessary for effective school reform and progress (Hart & Bredeson, 1996; Krajewski, 1996). The goals and priorities of the school might be better met through training if the principals are active in teacher professional development and direct instruction.

The development of teachers' knowledge and abilities to the demands of the school can help students. Studies by Berkey (1995) and Loucks-Horsley et al. (1998) strongly emphasized the role of principals in fostering an environment that promotes teachers' growth and allows schools to focus more effectively on teachers' instructional needs.

Another way in which principals substantially impact teacher training and development in schools is by fostering an atmosphere that encourages teachers to develop and enhance their professional practice (Bredeson, 2016) and enhance student outcomes while reducing teacher turnover. Principals contribute to developing a shared understanding of professional self-efficacy among teachers by highlighting the link between teacher development, improved teaching techniques, and student learning. Successful principals also have high standards for student performance and professional conduct (Bredeson, 2016).

Besides principals' involvement in teachers' professional development, much research has been conducted on how principals foster collaboration. For example, Goddard et al. (2015) describe how principal leadership promotes teacher cooperation, which leads to greater collective efficacy within a school. In turn, these favorable associations are linked to higher student outcomes. Supovitz et al. (2010), demonstrate that principals' impacts on teacher instruction are partly mediated by effects on teachers collaborating on instructional challenges.

PLCs, or professional learning communities, are famous for formalizing and enhancing teacher collaboration. Good PLCs are strongly related to other factors that affect learning, such as a positive school climate and instructional support systems (Leithwood & Jantzi, 2008). Successful principals prioritize professional development and promote teacher communities and groups at a school. According to Park et al. (2019), developing and maintaining these communities enhances student success.

When actively involved in instructional leadership, principals may significantly affect school and student outcomes. Principals may support the creation of a culture of learning that benefits the whole school

community by monitoring and evaluating educational results, participating in curriculum development, supporting teacher training, and encouraging teacher-to-teacher collaboration.

3.4. Administrative management

This subsection explores the literature on the relation between administrative management traits of school principals and school and student outcomes.

3.4.1. Financial management

In the contextual regards to the educational sector, this document defines the topic “financial management” per a study conducted on school principals and their competence in financial management as the “budgeting, accounting, and monitoring... of budgets” specifically used for educational services (Wagithunu et al., 2014). Furthermore, the World Bank adds that financial management regarding education is the effective and efficient use of financial resources to achieve a country’s educational goals (World Bank).

For the purpose of defining the term in this section, financial management refers to the effective and efficient budgeting, accounting, and monitoring of budgets. In the case of Guatemala, in which principals in schools within the scope of this report have limited budgets available to them, schools are particularly susceptible to ineffective and inefficient financial management practices as it can exacerbate negative student outcomes by adding educational achievement barriers for children already facing them (Johnson & Greg, 2004). Therefore, schools with constrained budgets are only set to directly benefit from the effective and efficient use of financial resources through planning, budgeting, and oversight to achieve their overarching educational goal of delivering quality education to their students.

In developing countries, financial management efficiency and efficacy are directly linked to student educational outcomes that oftentimes result in higher test scores and higher educational attainment (Bruns et al., 2011). Paul Glewwe and Michael Kremer further support this reasoning in their research by demonstrating how the importance of effective and efficient financial management practices can help schools to achieve their predetermined educational goals and fortify the sustainability of education (Glewwe & Kremer, 2006).

3.4.2. Resource allocation:

In defining the topic term “resource allocation”, this document excludes financial resources and solely focuses on infrastructure, teaching and learning materials, human resources, professional development for teachers and principals, and any other non-financial resources when discussing resource allocation. The goal is to ensure that the aforementioned resources are used efficiently and effectively to achieve the predetermined educational goals in Guatemala.

Proper resource allocations in the context of the educational sector can be a complicated procedure that may require interventions to counterbalance competing pressures and priorities to ensure that resources are distributed efficiently. However, Bruns and Mingat do provide a general process for how resource allocation is approached, which includes setting priorities, developing strategies, and making a decision about the allocation of resources based on needs (Bruns & Patrinos, 2011).

In looking at resource allocation as a driving factor for better administrative management, the literature review offered in Ladd's article about the importance of resource allocation is emphasized for affecting students' educational outcomes. The article provides an argument for a direct link in how improving resource allocation can contribute to the reduction of the educational achievement gap amongst students with different economic backgrounds (Ladd, 2012).

4. ACTIONS TO PROMOTE IMPROVEMENTS IN EACH DIMENSION

Based on the literature presented above, this section discusses some of the actions, documented in the existing literature, that schools and their principals have conducted in each of the four dimensions of school management and leadership. In subsequent stages of the Project, this literature review will be translated into concrete action recommendations for principals' trainings, tailored to the specific context in which PoP operates in Guatemala.

4.1. Strategic leadership

To build a strong foundation for a school, creating a vision statement and determining the school's values and goals should not be solely isolated to the principal. Instead, schools should take on a collaborative approach to develop their school vision, values, and objectives. If schools are in turmoil or need change, having that strong foundation of goals and values helps keep the community aligned and on the same path of pivoting to a new direction. Communities can benefit from building a team of teachers who instruct a specific grade level and work jointly to determine the outcomes of each grade level and unit of instruction (Eaker & DuFour, 2009).

Additionally, several activities can help a school work together to identify its vision and core values. In a workshop, schools can gather their school's mission statement from the past ten years. The teams should discuss which parts of the mission statement have changed over time, which values were dropped and why, and which values have endured the changes. They can then discuss which values they want to retain in refining their current mission statement. Subsequently, they can construct a two-column table with the left column stating their values and purposes and the second column stating how they will enact those values in their actions and behaviors in school. All teachers, students, parents, and community members must see the vision statement in a way that they can connect and engage with to do their part in contributing to meeting this vision (Peterson & Deal, 2009).

An alternative way in which principals can place the focus of the school's activity on outcomes is to look at the school's mission and vision statements and establish goals to benchmark the progress. Principals can create S.M.A.R.T benchmarks so that the goals are more realistic to achieve: S - Strategic & Specific, M - Measurable, A - Attainable, R- Results-oriented, T - Time-bound (Eaker & DuFour 2009).

4.2. People engagement

Collaborative actions can be instrumental in the development of well-trained principals. One action schools and communities can take is to create a mentorship program for their principals. Experienced principals will serve as a mentor and work with their mentee, a less-experienced principal, to create a professional development plan. The mentor can help guide their learner to find effective strategies to resolve their issues, help boost their confidence, and gain a handful of leadership skills (Darling-Hammond et al., 2022). Mentors will model the behaviors of a successful principal and provide feedback for their

mentees to improve their teaching methods. The goal is for the mentor and mentee to meet less over time as the mentee should become more self-sufficient and confident in performing their job adequately with all the tools their mentors equipped them with. Studies have revealed that dynamic instructors contribute to the success of principal programs as the experienced instructor influences the knowledge regarding instruction and capacities to assist and develop new leaders (Ibid.).

Along the same vein as a mentorship program, communities can build cohort groups to share knowledge. As Darling-Hammond et al., (2022) noted, adult learning is best accomplished when the learning is done through social activities. These social activities are practical because there are no hierarchical structures; everyone functions at the same authority level, shares their knowledge, and practices teamwork in oriented situations. These cohorts show many positive effects, including enhanced motivation, increased creativity, mutual assistance, and enhanced motivation (Darling-Hammond, Wechsler, Levin, Leung-Gagne, Tozer, 2022). A principal can benefit from having multiple perspectives on a single issue and applying different strategies to determine the best method for them and their leadership.

Another proposed activity by Darling-Hammond et al. (2022), is implementing workshops focusing on problem-based learning. These workshops simulate real-life situations that teachers encounter in their classrooms. Workshop facilitators can provide principals with the skills to tackle such issues, encouraging them to transfer their theoretical knowledge into practical knowledge. Teachers and principals can improve their problem-solving capacities by completing these workshops.

All of these proposed activities have led to the empowerment of instructors and principals. Creating positive relationships among principals and teachers and having well-prepared leaders can predict the improvement progress of a school and the frequency with which the principal will utilize effective practices (Ibid.). Suppose a principal displays strong leadership skills under the dimension of people engagement (developing their teachers, providing quality feedback and professional development opportunities, and encouragement). In that case, it will indirectly lead to student learning gains (Bartanen, 2020; Coelli & Green; Grissom et al., 2015; Grissom et al., 2021; Leithwood et al., 2004).

4.3. Instructional engagement

Grissom, Egalite & Lindsay (2021) emphasize that feedback and coaching are essential for principals involving in instructional-focused teacher interactions. In a school setting, principals can include regularly scheduled meetings with teachers to discuss instructional practices, student progress, and opportunities for teachers to share their experiences and challenges. Principals could also attend coaching sessions with experienced educators from other schools or communities, learn online courses on pedagogical best practices, and then discuss how to modify instructional practices with teachers.

In data-driven world, by establishing collaborative "data chats" between principals and teachers, for example, principals may contribute to fostering a culture that values data to enhance their teaching methods, according to Cohen-Vogel and Harrison (2013). Blanc et al. (2010) emphasize using interim assessment data to improve teaching and learning consistency in schools with robust feedback systems. Data from interim assessments can pinpoint areas where students are having difficulty and where further help is required. By evaluating the data, teachers, and principals can see patterns and trends in student performance. They can then modify their curriculum. By doing this, teachers can ensure that every student gets the required assistance to succeed. Teachers may find best practices and learn from one another's

accomplishments and issues by sharing data and evaluating it collectively, which also fosters teacher-to-teacher collaboration, which will elaborate on below.

Principals can involve surveys of parents, students, and community members to gather feedback on current school programs and services and suggestions for improvement. Collecting feedback will give them insights into designing the curriculum to fit community requirements and be meaningful to the community. Principals can provide open parent sessions to engage parents in their children's classrooms, as Gordon and Louis (2009) stress.

As an alternative way to focus on learning, principals can provide teachers with the national curriculum standards and assist them in analyzing the strengths and weaknesses of their student's scores on the national assessments. After sharing knowledge, they can work together to pinpoint areas in the curriculum that are inessential and remove them from the school's teaching units. Once the team has determined what should be taught to students, they can create a tool that contains the performance standards to measure students' academic growth. Principals and teachers can also develop a backup plan or alternative strategies to support students not learning at the intended speed. Alternate strategies can include creating internships for high school students interested in education to help elementary students master their skills (Eaker & DuFour, 2009). Alternatively, schools can create a peer tutoring system, such as pairing a 5th grader with a kindergarten buddy to work on essential skills or create a master schedule and find time slots where students can get individualized attention and support without removing them from their direct instruction (Ibid.).

To promote a culture of teacher-to-teacher collaboration, principals can create a master schedule and provide windows of time where teachers can work collaboratively rather than in isolation. Subsequently, principals can keep teachers on track to ensure that this period is productive by drafting up meeting protocols or norms on how each meeting should be conducted and focus on three key questions:

- What do we want students to learn?
- How will we know if they have learned it?
- What will we do if they do not learn it?

Answers or meeting notes should be recorded to help monitor the progress of students and teachers. Principals should attend the meetings and provide feedback and encouragement at the end of each session. Then, principals should hold biannual evaluations to assess how the team is performing together and if any changes need to be made (Ibid.).

4.4. Administrative management

Research in rural/indigenous schools demonstrates that principals lack the proper training or experience to effectively perform all their responsibilities (Wieczorek & Manard, 2018). In fact, research found that novice principals in rural communities lack the capacity and resources to undertake their responsibility, in both managerial and leadership functions, due to the unique structure of the rural schools and communities that present considerable obstacles for novice principals as they may not be fully prepared for their role. Furthermore, research has also demonstrated how principals in rural communities who are expected to perform their roles are constantly overwhelmed and experience tremendous pressure to meet expectations. This is likely to be the case for school principals in rural/indigenous communities in Guatemala. However, the functions of school principals in Guatemala are further hindered by low principal

retention rates in schools (Kooymans et al., 2013), as this tends to be the case in the context of Guatemalan schools noted in the SIPA team's preliminary data collection. Therefore, it is particularly important that proper actions are taken to ensure positive outcomes in schools. This section will offer actions for principals, more specifically in the administrative managerial capacity of their roles.

Capacity building in financial management: This action strategy specifically refers to equipping novice principals, and principals who lack the proper knowledge, to undertake financial management tasks through basic training. The literature review supports this action by demonstrating how most principals in rural schools are not required or may not even possess financial management knowledge within the scope of their training (Myende et al., 2018). This sort of capacity-building training can be done by assessing principals' knowledge of financial management skills and through workshops providing them with proper tools and methods for effective and efficient budgeting, accounting, and financial monitoring. Since the workshop's main goal is to teach principals effective and efficient financial management practices, the training can be effectively provided in a classroom-based setting.

Participation and collaboration approaches: This action strategy seeks to create an inclusive approach to financial management by including other school personnel and community members to participate in financial management responsibilities (Johnson & Malhoit, 2004). This will follow a similar structure to the FINCOM program, a committee created in African schools and discussed in the South African Journal of Education, highlighting shared responsibility for finances as a common practice for creating transparency and accountability (Myende et al., 2018). A participative and collaborative approach can be extended to other forms of resource management, such as teaching and learning materials allocation or infrastructure responsibilities. While this action strategy requires a community-based approach for better administrative management, Guatemala's community-oriented approach in schools can be leveraged towards generating a sort of community buy-in in shared responsibility committees.

Homemade policy procedures: In the context of Guatemala's schools in this report, the unique nature of the schools requires principals to follow a specific set of contextualized policies relevant to their schools. However, national-based policy standards can be ill-fitted when it comes to applying them to indigenous and/or rural schools, which can pose additional challenges in the administrative management sector for principals. Furthermore, the constant rotation of principals means that newcomers will need to assume the role of principal in a setting in which they may not be familiarized and the only way to learn may be through trial and error. A set of homemade policy procedures seeks to create a set of "school-designed interpretations" of the national standard policies for management procedures (Myende et al., 2018). This strategy can be applied in any administrative procedure in which principals note major challenges. In doing so, this action strategy will seek to bypass those challenges and create consistency across the board.

Limited technological uses: Keeping in mind the limited resources available to rural and indigenous schools in Guatemala, the advent use of technological resources as an action strategy can be increasingly useful for administrative management responsibilities in the later years. As schools acquire more technology, the demand for learning how to use those technological devices will increase. In fact, during initial interviews with school principals in Guatemala, there appeared to be a repeated acknowledgment of the lack of technological skills among administrators. Implementing workshops in a classroom-based like setting for teaching how to use technology can be helpful for better financial management practices or any other administrative roles.

REFERENCES

- Asana. (2022, October 4). *Be Productive at Home: 11 Tips to Promote Efficiency [2023]*. Asana. Retrieved May 2, 2023, from <https://asana.com/resources/eisenhower-matrix>
- Bagley, G. (2022). *Organizational Culture and Talent Management* [Lecture at Columbia University's School of International and Public Affairs] [PowerPoint].
- Bamburg, J. D., & Andrews, R. L. (1991). School Goals, Principals, and Achievement. *School Effectiveness and School Improvement*, 2(3), 175-191. <https://doi.org/10.1080/0924345910020302>
- Barrett, P., Treves, A., Shmis, T., Ambasz, D., & Ustinova, M. (2019). *The Impact of School Infrastructure on Learning*. ERIC. <https://files.eric.ed.gov/fulltext/ED604388.pdf>
- Bartanen, B. (2020). Principal quality and student attendance. *Educational Researcher*, 49(2), 101-113.
- Be Productive at Home: 11 Tips to Promote Efficiency [2023]*. (2022, October 4). Asana. Retrieved April 30, 2023, from <https://asana.com/resources/eisenhower-matrix>
- Bianchi, N. (2018, October 18). *How to Use the Four Modes of Persuasion to Make Your Writing Irresistible*. Nicole Bianchi. Retrieved February 27, 2023, from <https://nicolebianchi.com/modes-of-persuasion/>
- Black, S. (2001). Morale matters: when teachers feel good about their work, research shows, student achievement rises. *American School Board Journal*, 188(1), 40-3.
- Blanc, S., Christman, J. B., Liu, R., Mitchell, C., Travers, E., & Bulkley, K. E. (2010). Learning to learn from data: Benchmarks and instructional communities. *Peabody Journal of Education*, 85(2), 205-225.
- Bodner, Z. (2019, February 5). *8 Core Responsibilities for Strong Leaders*. Chronicle of Philanthropy. Retrieved March 6, 2023, from <https://www.philanthropy.com/article/8-core-responsibilities-for-strong-leaders/>
- Bredeson, P. V. (2000). The school principal's role in teacher professional development. *Journal of in-service education*, 26(2), 385-401.
- Bruns, F. B., & Patrinos, H. A. (2011). *Making schools work: New evidence on accountability reforms*. World Bank Publications.
- Bryk, A.S., & Schneider, B. (2002). *Trust in Schools: A Core Resource for Improvement*. Russell Sage.
- Charner-Laird, M., Ng, M., Johnson, S. M., Kraft, M. A., Papay, J. P., & Reinhorn, S. K. (2017). Gauging Goodness of Fit: Teachers' Responses to Their Instructional Teams in High-Poverty Schools. *American Journal of Education*, 123(4), 553-584.
- Chemers, M. M. (1997). *An Integrative Theory of Leadership*. Lawrence Erlbaum Associates.
- Cohen-Vogel, L., & Harrison, C. (2013). Leading with data: Evidence from the national center on scaling up effective schools. *Leadership and Policy in Schools*, 12(2), 122-145.
- Coleman, J. (2013, May 6). *Six Components of a Great Corporate Culture*. Harvard Business Review. Retrieved March 1, 2023, from <https://hbr.org/2013/05/six-components-of-culture>

Danridge, J. C., Edwards, P. A., & Pleasants, H. M. (2000). Making kids winners: New perspectives about literacy from urban elementary school principals. *The Reading Teacher*, 53(8), 654–662.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Terry Orr, M., & Cohen, C. (2007). *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*. Stanford Educational Leadership Institute. <http://seli.stanford.edu>

Darling-Hammond, L., Wechsler, M. E., Levin, S., Leung-Gagné, M., & Tozer, S. (2022). *Developing Effective Principals: What Kind of Learning Matters?* Learning Policy Institute. <https://doi.org/10.54300/641.201>

DuFour, R., & Berkey, T. (1995). The Principal as Staff Developer. *Journal of Staff Development*, 16(4), 2-6.

Eaker, R., & DuFour, R. (2009). *Getting Started: Reculturing Schools to Become Professional Learning Communities*. Solution Tree Press. <https://ebookcentral.proquest.com/lib/columbia/detail.action?docID=3404840>

Fullan, M. (2001). *Leadership and Sustainability: System Thinkers in Action*. Sage Publications.

Garet, M. S., Wayne, A. J., Brown, S., Rickles, J., Song, M., Manzeske, D., & American Institutes for Research. (2017). The Impact of Providing Performance Feedback to Teachers and Principals. U.S. Department of Education.

Glewwe, P., & Kremer, M. (2006). Chapter 16 Schools, Teachers, and Education Outcomes in Developing Countries. In *Handbook of the Economics of Education* (2nd ed., pp. 945-1017). [https://doi.org/10.1016/s1574-0692\(06\)02016-2](https://doi.org/10.1016/s1574-0692(06)02016-2)

Goddard, R. D., Skrla, L., & Salloum, S. J. (2017). The role of collective efficacy in closing student achievement gaps: A mixed methods study of school leadership for excellence and equity. *Journal of Education for Students Placed at Risk*, 22(4), 220–236.

Gois, A. (2020). *Líderes na escola : o que fazem bons diretores e diretoras, e como os melhores sistemas educacionais do mundo os selecionam, formam e apoiam*. Fundação Santillana.

Goleman, D., McKee, A., & Boyatzis, R. E. (2013). *Primal Leadership: Unleashing the Power of Emotional Intelligence*. Harvard Business Review Press.

Gordon, M. F., & Louis, K. S. (2009). Linking parent and community involvement with student achievement: Comparing principal and teacher perceptions of stakeholder influence. *American Journal of Education*, 116(1), 1- 31.

Grissom, J.A. (2011). Can good principals keep teachers in disadvantaged schools? Linking principal effectiveness to teacher satisfaction and turnover in hard-to-staff environments. *Teachers College Record*, 113(11), 2252-2585.

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How Principals Affect Students and Schools: A Systematic Synthesis of Two Decades of Research*. The Wallace Foundation. <http://www.wallacefoundation.org/principalsynthesis>

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). How principals affect students and schools: A systematic synthesis of two decades of research. *New York: The Wallace Foundation*.

- Hands, C. (2005). It's Who You Know and What You Know: The Process of Creating Partnerships between Schools and Communities. *School Community Journal*, 63-84.
- Hart, A. W., & Bredeson, P. V. (1996). *The Principalship: a theory of professional learning and practice*. New York: McGraw-Hill.
- Heck, R. H. (1992). Principals' Instructional Leadership and School Performance: Implications for Policy Development. *Educational Evaluation and Policy Analysis*, 14(1), 21-34.
- Heck, R. H., Larsen, T. J., & Marcoulides, G. A. (1990). Instructional leadership and school achievement: Validation of a causal model. *Educational Administration Quarterly*, 26(2), 94-125.
- Heck, R. H., Marcoulides, G. A., & Lang, P. R. (1991). Principal Instructional Leadership and School Achievement: The Application of Discriminant Techniques. *School Effectiveness and School Improvement*, 2(2), 115-135.
- Holland, P. E. (2009). The Principal's Role in Teacher Development. *State Journal*, 18(1), 16-24.
- Home. (n.d.). The Akanksha Foundation. Retrieved April 29, 2023, from <https://www.akanksha.org/we/our-story/>
- Hoy, W.K., Tarter, C.J., & Witkoskie, L. (n.d.). Faculty trust in colleagues: linking the principal with school effectiveness. *Journal of Research and Development in Education*, 26(1), 235-55.
- Hughes, A. L., Matt, J. J., & O'Reilly, F. L. (2015). Principal Support is Imperative to the Retention of Teachers in Hard-to-Staff-Schools. *Journal of Education and Training Studies*, 3(1), 129-134. <http://jets.redfame.com>
- Johnson, J., & Malhoit, G. (2004). Best Fiscal Management for Rural Schools. Rural Trust Policy Brief Series on Rural Education. *Rural School and Community Trust*.
- Klar, H. W., & Brewer, C. A. (2013). Successful leadership in high-needs schools: An examination of core leadership practices enacted in challenging contexts. *Educational Administration Quarterly*, 49(5), 768-808.
- Kooymans, R., Jakubiec, B. A., & Preston, J. P. (2013). Common Challenges Faced by Rural Principals: A Review of the Literature. *The Rural Educator*, 35(1). <https://doi.org/10.35608/ruraled.v35i1.355>
- Kotter, J. P. (2001). What Leaders Really Do. *Harvard Business Review*.
- Kraft, M., & Gilmour, A. (2016). Can principals promote teacher development as evaluators? A case study of principals' views and experiences. *Educational Administration Quarterly*, 52(5), 711-753.
- Krajewski, R. (1996). Enculturating the school: the principal's principles. *NASSP Bulletin*, 80, 3-8.
- Ladd, H. F. (2012). Education and Poverty: Confronting the Evidence. *Journal of Policy Analysis and Management*, 31(2), 203-227.
- Lapidot, Y., Kark, R., & Shamir, B. (n.d.). The impact of situational vulnerability on the development and erosion of followers' trust in their leader. *Leadership Quarterly*, 18(1), 16-34. 2007

- Leithwood, K., & Jantzi, D. (2005). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201-227.
- Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly*, 44(4), 496–528.
- Lencioni, P. M. (2002). *Make Your Values Mean Something*. Harvard Business Review. Retrieved March 1, 2023, from <https://hbr.org/2002/07/make-your-values-mean-something>
- Liebowitz, D. D., & Porter, L. (2019). The Effect of Principal Behaviors on Student, Teacher, and School Outcomes: A Systematic Review and Meta-Analysis of the Empirical Literature. *Review of Educational Research*, 89(5), 785-827.
- Louck-Horsely, S., Hewson, P. W., Love, N., & Stiles, K. E. (1999). Designing Professional Development for Teachers of Science and Mathematics. *Thousand Oaks: Corwin Press*.
- Lowe, K., Harrison, N., Tennent, C., Guenther, J., Vass, G., & Moodie, N. (2019, March 21). Factors Affecting the Development of School and Indigenous Community Engagement: A Systematic Review. *The Australian Educational Researcher*, 46, 2533-271. <https://doi.org/10.1007/s13384-019-00314-6>
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational administration quarterly*, 39(3), 370-397.
- Mayer, R., Davis, J., & Schoorman, F.D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3), 709-34.
- McGregor, L., & Doshi, N. (2015, November 25). *How Company Culture Shapes Employee Motivation*. Harvard Business Review. Retrieved March 6, 2023, from <https://hbr.org/2015/11/how-company-culture-shapes-employee-motivation>
- Ministry of Education Science and Technology. (2000). In *Handbook For Inspection of Education Institutions*.
- Minoi, J.-L., Mohamad, F., Arnab, S., Phoa, J., Morini, L., Beaufoy, J., Lim, T., & Clarke, S. (2019). A Participatory Co-Creation Model to Drive Community Engagement in Rural Indigenous Schools: A Case Study in Sarawak. *Electronic Journal of e-Learning*, 17(3), 173-183. Retrieved 03 06, 2023, from <https://eric.ed.gov/?id=EJ1223594>
- Mukuria, G. (2002). Disciplinary challenges: How do principals address this dilemma? *Urban Education*, 37(3), 432- 452.
- Myende, P. E., Samuel, M. A., & Pillay, A. (2018, May). Novice Rural Principals' Successful Leadership Practices in Financial Management: Multiple Accountabilities. *South African Journal of Education*, 38(2), 1-11. <https://doi.org/10.15700/saje.v38n2a1447>
- Pandolfi, F. (2011, March 14). *How to Create an Effective Non-Profit Mission Statement*. Harvard Business Review. Retrieved March 7, 2023, from <https://hbr.org/2011/03/how-nonprofit-misuse-their-mis>

Park, J. H., Lee, I. H., & Cooc, N. (2019). The role of school-level mechanisms: how principal support, professional learning communities, collective responsibility, and group-level teacher expectations affect student achievement. *Educational Administration Quarterly*, 55(5), 742-780.

Peterson, K. D., & Deal, T. E. (2009). *The Shaping School Culture Fieldbook*. Wiley. <https://web-s-ebSCOhost-com.ezproxy.cul.columbia.edu/ehost/ebookviewer/ebook/bmxlYmtfXzc0MjA0Xl9BTg2?sid=8fb296fa-a6fe-48fb-a649-78a13b279951@redis&vid=0&format=EB&rid=1>

Podsakoff, P.M., Mackenzie, S.B., Moorman, R.H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107-42.

Pont, B., Nusche, D., & Moorman, H. (2008). *Improving School Leadership Volume I: Policy and Practice. Organisation for Economic Co-Operation and Development*. https://drive.google.com/drive/u/0/folders/1bd10Z4xwxrAo3WF0zSHknGE_LXpCuH7R

PricewaterhouseCoopers. (2007). *Independent Study Into School Leadership: Main Report*. Department for Education and Skills.

Reyes, A., & Garcia, A. (2014). Turnaround policy and practice: A case study of turning around a failing school with English-language-learners. *The Urban Review*, 46(3), 349-371.

Rimm, S., & Sandilos, L. (2010). *Improving students' relationships with teachers*. American Psychological Association. <https://www.apa.org/education-career/k12/relationships>

Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational administration quarterly*, 44(5).

Sanders, M. G. (2003, February). Community Involvement in Schools: From Concept to Practice. *Education and Urban Society*, 35(2), 161-180. <https://doi.org/10.1177/0013124502239390>

Sanzo, K. L., Sherman, W. H., & Clayton, J. (2011). Leadership Practices of Successful Middle School Principals. *Journal of Educational Administration*, 49(1), 31-45.

Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly*, 48(4), 626-663.

Sinek, S. (2014). *Why good leaders make you feel safe* [Ted Talk Conference] [Video]. https://www.ted.com/talks/simon_sinek_why_good_leaders_make_you_feel_safe

Smith, J.A., Larkin, S., Yibarbuk, D., & Guenther, J. (2017). What Do We Know About Community Engagement in Indigenous Education Contexts and How Might This Impact on Pathways into Higher Education? In S. Larkin, J. A. Smith, & J. Frawley (Eds.), *Indigenous Pathways, Transitions and Participation in Higher Education: From Policy to Practice* (pp. 31-44). Springer Nature Singapore. https://doi.org/10.1007/978-981-10-4062-7_3

Steinberg, M. P., & Sartain, L. (2015). Does Teacher Evaluation Improve School Performance? Experimental Evidence from Chicago's Excellence in Teaching Project. *Education Finance and Policy*, 10(4), 535-572.

- Supovitz, J., Sirinides, P., & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly*, 46(1), 31–56.
- Theoharis, G., & O'Toole, J. (2011). Leading Inclusive ELL: Social Justice Leadership for English Language Learners. *Educational Administration Quarterly*, 47(4), 646-688.
- Tschannen-Moran, M. (2004). *Trust Matters: Leadership for Successful Schools*. Jossey-Bass.
- Turney, S. (2022, July 6). *Central Limit Theorem | Formula, Definition & Examples*. Scribbr. Retrieved April 29, 2023, from <https://www.scribbr.com/statistics/central-limit-theorem/>
- Wagithunu, M. N., Muthee, J., & Thinguri, D. R. (2014). A Critical Analysis of School Principals' Competence in Financial Management in Kenya: Accountability in Educational Planning and Management. *Journal of Education and Practice*, 5(25), 103-107.
- Wallace Foundation. (2013). *The School Principal as Leader: Guiding Schools to Better Teaching and Learning. Perspective. Expanded Edition*.
- Wieczorek, D., & Manard, C. (2018). Instructional Leadership Challenges and Practices of Novice Principals in Rural Schools. *Journal of Research in Rural Education*, 34(2), 1-21.
- Willms, D. J. (2000). Monitoring School Performance for "Standards-based Reform." *Evaluation and Research in Education*, 14(3&4).
- World Bank. (n.d.). *Education Finance: Using Money Effectively is Critical to Improving Education*. The World Bank. Retrieved March 10, 2023, from https://www.worldbank.org/en/topic/education/brief/education-finance-using-money-effectively-is-critical-to-improving-education?cid=EXT_WBEmailShare_EXT
- Yee, L. W. (2016). Peer coaching for improvement of teaching and learning. *Journal of Interdisciplinary Research in Education (JIRE)*, 6(1), 64-70.
- Ylimaki, R., Bennett, J. V., Fan, J., & Villasenor, E. (2012). Notions of "success" in southern Arizona schools: Principal leadership in changing demographic and border contexts. *Leadership and Policy in Schools*, 11(2), 168– 193.
- Young, J., & Warren, D. E. (2003). Parent Partnerships in Primary School: An Emerging Model. 1-13.