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TOWARDS PREPARING MIDDLE LEADERS TO PERFORM INSTRUCTIONAL SUPERVISORY FUNCTIONS: THE CASE OF A LEBANESE PRIVATE SCHOOL

by
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ABSTRACT

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Title: Towards Preparing Middle Leaders to Perform Instructional Supervisory Functions: The Case of a Lebanese Private School

This study examined the middle leaders' role, their instructional supervisory functions, the nature of the challenges they faced, the enabling organizational factors, and their learning needs as they transition into their new role. The study also aimed to develop a plan for an induction program to prepare middle leaders for their supervisory functions in the selected school. The study adopted a qualitative single case-study design and employed the constant comparison method for data analysis. Data included semi-structured individual interviews and focus group interviews, relevant school documents, and journal notes. The results of the study show that the participants' perceptions regarding their role and functions transcend the cultural context and confirm what was found in the Western literature on middle leadership and instructional supervision namely, the context-related conception of the middle leaders' role and its complexity, and the types of instructional supervisory functions they are expected to perform. However, the study results reveal other role and function-related aspects that are shaped by the local and organizational contexts. The study findings also helped to develop an understanding of the challenges and the enabling factors emanating from the unique demands of a school serving multiple curricula. Based on the study results, recommendations for practice were suggested in the form of a plan for an induction program and recommendations for future research were proposed. The design characteristics for the proposed induction program include (1) the content covering competencies and skills that can support the targeted middle leaders in performing their supervisory functions, (2) the approach that aligns with the way practicing professionals learn, and (3) the practices and strategies that are in-line with the approach.

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CHAPTER 1

INTRODUCTION

Background

I would like to start this chapter by describing my professional path as a practitioner, in order to justify my choice of this topic as a researcher. Like many school leaders in Lebanon, I started my profession as a teacher in the school under study. I taught science for almost 25 years in the national and the international programs adopted by the school. At different stages of my teaching career, I was assigned administrative tasks without getting any pre-service preparation or even on-the-job training to prepare me for these functions. I was first asked to chair the science department, after that I coordinated the elective program until I was appointed assistant to the middle school director. Enacting each of these roles had its challenges especially that I transitioned into the role without receiving any preparation for my new functions. Consequently, I became interested in analyzing the professional development needs of middle leaders while they transition into the role of instructional supervisors. This developed later into an interest in identifying the design characteristics (content, approach, and practices) of an effective induction program for supporting middle leaders performing instructional supervisory functions.

As I began to explore the literature, I realized that my path to transitioning to middle leadership is common to the experiences reported across the international literature. Ng and Kenneth-Chan (2014) state that middle leaders "start their professional careers as teachers and progress to headship via a variety of leadership roles and formal responsibility" (p. 870).

Middle leaders are those who occupy a position between senior school leaders and teachers. Depending on the context, their position is referred to as subject coordinator, head of subject, department chair, or curriculum coordinator. On the other hand, international studies have shown that regardless of the formal label of their positions, the instructional functions dominate the responsibilities of middle leaders (Javadi et al., 2017). Similar studies conducted in Lebanon confirm that middle leaders are the ones who perform most of the instructional supervisory functions in their schools (Chmeissani, 2013; Ghamrawi, 2013; Itani-Malas, 2019). For the purpose of this study, middle leaders are defined as those leaders operating between senior leaders, and teachers and performing instructional supervisory functions in their schools. In the context of the selected school these middle leaders have the position title of subject experts. In the same context, the term "senior leaders" refers to the school president, the vice-presidents, the cycle-schools directors, and the HR and ERC directors.

Moreover, Sergiovanni and Starratt (2007) advance that instructional supervision is a function that can be performed by practitioners at different levels of the system. Sergiovanni and Starratt (2007) add that the functions and tasks of instructional supervisors are considered as an "important part of many roles beginning with teachers in the classroom and stretching all the way through the central office of the superintendent" (p. 287). Similarly, Itani-Malas (2019) clarifies that department chairs, heads of divisions, instructional coaches, subject coordinators, and curriculum leaders are formal teacher leaders who are officially assigned the task of supporting teachers. However, teachers are often supported by their colleagues who do not have official titles and who are considered as informal teacher leaders.

Despite the difference in the cultural context and the variation in the availability of the pre- and in-service preparation programs; instructional supervisors worldwide mostly learn on the job (Bouckaert & Kools, 2018; Gurr & Drysdale, 2013; Karami-Akkary, 2014; Ng & Kenneth-Chan, 2014). Consequently, it is not surprising that middle leaders are reported to face difficulties when they first assume their instructional supervisory functions because most of them simply "fall into the profession" (Bouckaert & Kools, 2018). Thus, it becomes essential to examine the obstacles faced by middle leaders when they first transition into the role, to be able to identify their professional development needs. Actually, Ng and Kenneth-Chan (2014) confirm the necessity to "conduct needs analysis for middle leaders so that suitable and appropriate professional development programs can be designed to meet their expectations" (p. 873). The study review by De Nobile (2018) also shows that the functions of middle leaders become more difficult if these leaders do not receive systemic preparation that is relevant to their needs.

As adult learners in a school system, middle leaders often seek immediate utility of what they learn, test the learning in the workplace, and reflect on its effectiveness (Hashem, 2013; Zepeda et al., 2014). Thus, for middle leaders, workplace learning is important because it is ongoing, and it enhances acquisition of competences needed for daily practices (Boavida et al., 2016; Bouckaert & Kools, 2018; Jureidini, 2018).

Middle leaders often describe best learning opportunities as practices where they had to perform authentic tasks in a supportive environment (Boavida et al., 2016; Ng & Kenneth-Chan, 2014). Similarly, Webster-Wright (2009) argues that professionals are adult learners who require shifting the focus towards authentic professional learning and designing professional development experiences to enhance the quality and

sustainability of their growth. Ng and Kenneth-Chan (2014) also maintain that professional development programs need to link teaching and learning theories to school practices.

The school selected for this study is atypical compared to the Lebanese private schools described in the reviewed studies conducted in the Lebanese context. Unlike other schools in Lebanon, this school offers the national program set by the Lebanese Ministry of Education, in addition to a college preparatory program guided by the United States' Common Core Standards, the International Baccalaureate Primary Years and Diploma programs, and the French program set by the French Ministry of Education. A detailed description of the school context will be provided later in the methodology chapter.

This study will focus on ten selected middle leaders, three former and seven current "subject experts" appointed during the past three years to supervise the different curricula of the four programs taught at this school. All ten, have initially joined the school as teachers, and they were later offered a reduced teaching load to be able to perform instructional supervisory functions without getting specific preparation for this function.

Problem Statement and Rationale

The reviewed international literature on educational leadership reveals an emerging interest in the West, in the role of middle leaders in relation to school improvement (Harris et al., 2019; Harris & Jones, 2017; Irvine & Brundrett, 2016; Javadi et al., 2017). However, the field is still undertheorized compared to senior leadership (De Nobile, 2018). Ng and Kenneth-Chan (2014) argue that research on middle leadership is becoming essential because middle leaders are the candidates for

future principals. They add that the role of middle leaders changes due to school reform and hence they regularly need professional development programs to meet the demands of their job. Furthermore, the study by Zepeda et al. (2014) on effective professional development of school leaders, concludes that it must: (1) resonate with the principles of adults learning, (2) meet the needs of the targeted leaders, and (3) take contextual conditions into consideration. Each of these features will be later explored in the chapter on literature review.

On the other hand, novice middle leaders in the Lebanese context are faced with a difficult transition into their new supervisory roles since pre-service preparation of school leaders is not mandated by Lebanese laws. Therefore, many of them lack the needed pre-service preparation on the various functions they are expected to perform especially as instructional supervisors (Karami-Akkary, 2014; Mattar, 2012). Furthermore, induction programs for novice practitioners in Lebanese schools is a practice that "seem to be rarely present if not completely absent" (Hashem, 2013, p. 190). Studies on instructional leadership in the Lebanese context (El Murr, 2015), often conclude with recommendations to establish preparation programs on "supervisory and leadership practices, skills and behaviors" (p. 263) to enable instructional leaders to effectively contribute to improve the professional learning of teachers in Lebanese schools.

Moreover, no studies were found that investigate the transition of middle leaders into their new roles, nor that examine the professional needs of these leaders who are formally responsible for supervising curriculum and instruction. Interest in the design and examination of the impact of induction programs to prepare these leaders for their functions is almost absent. Considering the important role played by middle leaders in

school improvement (Harris et al., 2009; Harris & Jones, 2017; Irvine & Brundrett, 2016; Javadi et al., 2017; Sergiovanni & Starratt , 2007), the various instructional supervisory functions they are expected to perform (Chmeissani, 2013; De Nobile, 2018; Javadi et al., 2017), and the lack of pre-service programs that prepare them for their functions, especially in Lebanon (Chmeissani, 2013; El Murr, 2015; Jureidini, 2018; Karami-Akkary, 2014); the experiences and challenges of middle leaders, especially as they transition into their instructional supervisory roles is worthy of further exploration.

This study builds on the reviewed literature on middle leadership and on instructional supervision (Chmeissani, 2013; De Nobile, 2018; Drago-Severson, 2004; El Murr, 2015; Irvine & Brundrett, 2016; Jureidini, 2018; Ng & Kenneth-Chan, 2014) to examine the functions of middle leaders and explore the nature of the challenges they face while transitioning into their new role, to identify their professional development needs, and the best approaches to meet them**.** The study explored the transition period when the participants first assumed their instructional supervisory functions as middle leaders, while focusing on their readiness to perform the tasks related to their functions in the school context. The study examined the challenges related to performing instructional supervisory functions as perceived by the selected participants, in order to understand the complexity of their experience, and the learning needs as they transition into the new role.

This study also builds on literature on effective professional development (Guskey & Yoon, 2009; Ng & Kenneth-Chan, 2014; Webster-Wright, 2009; Zepeda et al., 2014) to identify the design characteristics of an effective induction program that aims to prepare middle leaders performing instructional supervisory functions.

Moreover, it focused on preparing middle leaders in a Lebanese private school that simultaneously offers the National program as well as multiple international programs providing in by itself a diverse context to examine.

Despite the dearth of research on instructional supervision in the Arab world (Karami-Akkary, 2019), scholars like Al-Kayumi & Hamad (2020), Chmeissani (2013), Ghamrawi (2013), and Itani-Malas (2019) attempt to identify general role requirements of instructional supervisors including coordinators and other teacher leaders. However, the reviewed research in the Lebanese context showed that the existing studies do not focus on preparing middle leaders to supervise instruction and multiple curricula required for the different programs taught in one school, which is the aim of this study. In fact, Chmeissani (2013) acknowledges the limitation of her study on instructional supervisors and recommends replicating her research in new contexts to provide additional information about the role of instructional supervisors in Lebanese private schools. Specifically, she suggests exploring instructional supervision in private schools that have international affiliation like the school chosen for this study in order to generalize the results to a broader sector of Lebanese schools.

Accordingly, the school under study was selected because it adopts the national program and three international programs; Therefore, its context is relatively different from the school contexts commonly described in both Western and Arabic literature. Thus, the results of this study add to the current knowledge base on middle leadership by revealing particular obstacles facing middle leaders supervising both national and international curricula in the Lebanese context, and by identifying design characteristics (content, approach, and practices) of an effective program that prepares middle leaders for their instructional supervisory functions.

Purpose and Research Questions

Most of the studies on school leadership investigate the different functions of upper and middle leaders, the challenges they face as instructional supervisors, and their pre- and in-service preparation programs. However, the professional development needs from the perspective of middle leaders performing instructional supervisory functions were examined to a lesser extent in the West and is almost absent in the Lebanese context (Chmeissani, 2013; De Nobile, 2018; Harris et al., 2019; Irvine & Brundrett, 2016; Jureidini, 2018; Mattar, 2012; Ng & Kenneth-Chan, 2014). Accordingly, the purpose of this study is to explore the challenges facing middle leaders when they transition into their new instructional supervisory role in the selected school, as well as to examine the professional needs of those leaders. The challenges and needs of middle leaders are explored in order to identify the design characteristics (content, approach, and practices) of an effective induction program to prepare them for their instructional supervisory functions in the context of the school under study.

This study aims to answer four research questions:

1. How do middle leaders (subject experts) perceive their role and functions as instructional supervisors in the school under study?
2. From their own perspective, what are the major challenges facing the middle leaders as they transition into the new supervisory role in the school under study?
3. What forms of organizational support (in terms of structure, policies, procedures, and actions) does the school provide to facilitate the transition of middle leaders into their new supervisory role?

4. What are the design characteristics of an effective induction program (content, approach, and practices) that aims to prepare middle leaders for their instructional supervisory functions in the school under study?

Significance of the Study

This study is significant to practitioners, researchers, and policy makers. In fact, this study provides practitioners further insight on the obstacles facing middle leaders as well as their professional development needs when they transition into the new supervisory role in a private Lebanese school offering multiple programs. Furthermore, the proposed design characteristics constitute an expansion to the pre- and in-service preparation of instructional supervisors in the West, as they attend to increasing the responsiveness of these models to the challenges faced in the context of Lebanese schools and offer insight on the level of their adaptability to non-western contexts. With that, this study fills a gap in the knowledge base on the preparation of middle leaders performing instructional supervisory functions that can guide future research on this topic.

Findings of this study can also have implications on educational policies in Lebanon. The results of this study provide data for policy makers to draft a framework for the role dimensions of middle leaders and the design of the pre-service programs to prepare them for their instructional supervisory functions. Finally, the results of this study might encourage universities and other organizations to re-engineer their leadership preparation programs, and to adapt the existing in-service programs to the emerging needs of school middle-leaders.

CHAPTER 2

LITERATURE REVIEW

This study focuses on generating an understanding of professional development needs of middle leaders to inform the design of a program aimed at preparing those leaders to perform instructional supervisory functions in the selected school. Therefore, the framing of the research questions is informed by the literature on middle leadership, instructional supervision, professional development, and adult learning.

This chapter has three main purposes. The first is to explore how the roles and functions of middle leaders, specifically in the context of Lebanese schools, is described in the literature. The second is to look into the challenges that middle leaders often face when they transition into their new role, and to explore the type of training -if any- they receive to help them overcome these challenges. The third purpose is to summarize the characteristics of effective professional development programs including principles of adult learning, to frame the design of an induction program for middle leaders performing instructional supervisory functions.

Middle Leaders

This section consists of four parts and will present an overview of middle leadership and a detailed exploration of the role and functions of middle leaders. It also presents middle leaders as instructional supervisors through conceptual models described in the literature on instructional supervision to better understand the supervisory functions that are often assigned to middle leaders. The section concludes with a presentation of what is known in the research literature about middle leaders in the Lebanese context.

An Overview of the Roles and Functions of Middle Leaders

To explore the knowledge base on middle leadership and to understand the importance of this layer of leaders in schools nowadays, Western and Arabic literature was reviewed. Almost all the reviewed studies show evidence of the positive impact that middle leaders have on school reform (Chmeissani, 2013; De Nobile, 2018; Glickman et al., 2010; Harris & Jones, 2017; Javadi et al., 2017; Jureidini, 2018; Ng & Kenneth-Chan, 2014; Thorpe & Bennett-Powell, 2014; Zepeda, 2003), and on the quality of teaching and learning (Chmeissani, 2013; De Nobile, 2018; El Murr, 2015; Gurr & Drysdale, 2013; Harris & Jones, 2017). While the reviewed literature reveals a prevalent interest in the roles and responsibilities of this layer of leaders (Chmeissani, 2013; De Nobile, 2018; Itani-Malas, 2019; Harris et al., 2019), the literature shows an inconsistency in defining their role (De Nobile, 2018; Gurr & Drysdale, 2013; Harris et al., 2019; Harris & Jones, 2017; Irvine & Brundrett, 2016; Javadi et al., 2017; Pawlas & Oliva, 2008; Sergiovanni & Starratt, 2007).

In fact, most of the school-reform plans described in the literature underline the pivotal role played by middle leaders – also known as formal teacher leaders- to decentralize decision-making in relation to teaching and learning (Itani-Malas, 2019; Zepeda, 2003). According to De Nobile (2018), ongoing changes in policies and increased accountability in the educational systems, overloaded senior school leaders, who delegated some of their functions to the middle leaders. Javadi et al. (2017) also describe middle leadership as "the embodiment of distributed leadership" (p. 481). Besides, Harris and Jones (2017) argue that "a significant part of the within-school variation can be found at the middle tier" (p. 214); hence, the importance of middle leaders in bringing about and maintaining improvement in schools (Jureidini, 2018; Ng

& Kenneth-Chan, 2014; Thorpe & Bennett-Powell, 2014). Likewise, Itani-Malas (2019) argues that the sustainability of school improvement does not rely only on the leadership of efficient principals; it also needs the involvement of other stakeholders, mainly teacher leaders, to maintain the change.

Furthermore, middle leaders performing instructional supervisory functions, are considered as "curriculum and instruction specialists" (Chmeissani, 2013), who have the potential to directly impact teaching and learning (Harris & Jones, 2017), and hence to positively influence students' performance (Gurr & Drysdale, 2013). In fact, De Nobile's (2018) theoretical model for middle leaders in schools (MLiS) emphasizes that "middle leaders may influence school effectiveness at least in three ways: teaching quality, teacher attitudes and student outcomes" (p. 408). Harris and Jones (2017) also advance that, middle leaders often impact school effectiveness through building learning communities within a school for teachers to collaborate on developing effective practices that can improve teaching and learning.

The role and responsibilities of middle leaders has been a topic of interest for educational research during the past two decades (Harris et al., 2019). For instance, the study by Javadi et al. (2017) examined, among other aspects, the role and responsibilities of heads of departments in four international schools in Malaysia. Similarly, the study by Chmeissani (2013) investigated the instructional supervisory functions at the middle tier level (coordinators and heads of departments) in two private Lebanese schools. The review by De Nobile (2018) also highlights a focus in the knowledge base on the role and functions of middle leaders. Moreover, his review emphasizes a shift in the terminology used to indicate this position from "middle

managers" mainly involved in administrative tasks to "middle leaders" performing more dynamic and strategic tasks targeting staff development and academic improvement.

On the other hand, the reviewed literature reveals an inconsistency in defining middle leadership since the role of leaders at the middle tier can be designated using different titles (Gurr & Drysdale, 2013; Harris et al., 2019) and it is associated with different functions (De Nobile, 2018; Harris & Jones, 2017). According to Gurr and Drysdale (2013) defining middle leadership is a challenging task since both scholars and practitioners use multiple terms such as coordinators, heads of program, lead teachers, and subject leaders to designate similar roles. Harris et al. (2019) confirm that "a more diverse set of middle leadership positions have emerged in the literature in more recent years" (p. 258). The term "middle leaders" is increasingly used in educational research (Gurr & Drysdale, 2013); however, formal middle leadership positions might differ from one school system to another (De Nobile, 2018).

Most researchers give broad descriptions for middle leaders by specifying their position in the organizational structure of a school, without identifying the specific role and functions of these position holders. For example, Irvine and Brundrett (2016) state that middle leaders act as "a fulcrum between the classroom teachers and the school's senior leaders" (p. 87). Similarly, Javadi et al. (2017) emphasize that this layer of leaders resides at the center of the school organization. In fact, middle leaders' central position helps them "translate the policies of senior leaders into practice" (Bassett & Shaw, 2017, p. 750).

On the other hand, some scholars define the role of middle leaders by identifying their functions such as performing some administrative tasks, supporting teachers, supervising curricula, and guiding instructional improvement; mentioning that

some of these functions can also be performed by individuals who are not formally in a middle leadership position (De Nobile, 2018; Harris & Jones, 2017; Pawlas & Oliva, 2008; Sergiovanni & Starratt, 2007). In fact, De Nobile (2018) states that defining middle leadership cannot be limited to “formal positions of responsibility” (p. 397), it must also reveal the functions of these position holders. Similarly, Sergiovanni and Starratt (2007) believe that supervision, which is the main function of middle leaders, “is best understood as both a role and a function" (p. 5). Therefore, the next sections present how different scholars describe the role of middle leaders, and how the context affects their functions.

Description of the Role of Middle Leaders

It is very challenging to find a unified description for the role occupied by middle leaders in different school contexts. However, the reviewed literature on middle leadership recognizes three common features of the middle leaders’ role. First, the conception of this role by practitioners and researchers is context related (De Nobile, 2018; Gurr & Drysdale, 2013; Harris et al., 2019; Javadi et al., 2017). Second, the role of middle leaders is often described as complex and involving some conflicting requirements (De Nobile, 2018; Gurr & Drysdale, 2013; Harris & Jones, 2017; Irvine & Brundrett, 2016; Ng & Kenneth-Chan, 2014). Finally, the responsibilities associated with this role are hybrid between teaching, management, and leadership (De Nobile, 2018; Gurr & Drysdale, 2013; Irvine & Brundrett, 2016; Javadi et al., 2017).

Complex Role with Conflicting Requirements

According to Gurr and Drysdale (2013) middle leaders have complex roles. The complexity of this role is also evidenced by the numerous areas of leadership capacity middle leaders need to be competent in, namely “strategic direction and policy

environment; learning, teaching and curriculum; teacher professional growth and development; staff and resources management; quality assurance and accountability; and external communication and connection to the outside world" (Ng & Kenneth-Chan, 2014, p. 873). The Middle Leadership in Schools model (MLiS-model) as developed by De Nobile (2018) confirms that middle leaders have a complex role comprising: student-focused, administrative, organizational, supervisory, staff development, and strategic role-categories. Furthermore, Irvine and Brundrett (2016) state that middle leaders are frequently "squeezed between the conflicting requirements of the senior leadership team and their departmental colleagues" (p. 87). In fact, middle leaders are often challenged to accomplish the responsibilities delegated to them by the senior leaders, and to provide support to those below them in the school hierarchy (Harris & Jones, 2017).

Hybrid Responsibilities Between Teaching, Management, and Leadership

Most middle leaders retain their role as teachers (Irvine & Brundrett, 2016) in addition to their management and leadership responsibilities (Gurr & Drysdale, 2013). According to Javadi et al. (2017), middle leaders are "part teachers and part leaders" (p. 480). De Nobile (2018) describes these position-holders as teachers who manage some aspects of the system, and lead school improvement. Irvine and Brundrett (2016) explains that middle leaders do not only manage the school systems and perform administrative tasks, but they also lead school reform and participate in the professional development of teachers. Itani-Malas (2019) identifies similar hybrid responsibilities assigned to formal teacher leaders in Lebanese schools.

Functions of Middle Leaders

Most of the reviewed studies on middle leadership focused on the functions of middle leaders (Harris et al., 2019) in order to identify the nature of their responsibilities (Chmeissani, 2013; De Nobile, 2018; Gurr & Drysdale, 2013; Javadi et al., 2017; Pawlas & Oliva, 2008), and to show evidence that contextual factors can impact their functions (Chmeissani, 2013; Irvine & Brundrett, 2016; Javadi et al., 2017; Lee et al., 2017; Pawlas & Oliva, 2008; Sergiovanni & Starrat, 2007).

There are four parameters to be considered when exploring the functions of middle leaders: "the nature, the scope, the priorities, and the perspectives of the senior leaders vis-à-vis the middle leaders" (Javadi et al., 2017, p. 478). This section will only look at the nature of middle leaders' functions as described in the reviewed literature. Because of the relatively limited authority given to middle leaders, they cannot be assigned the same functions as those performed by senior leaders (De Nobile, 2018). Hence, the nature of their responsibilities is different than that of senior leaders. Furthermore, the different terms used to designate the role of middle leaders have contributed to diverse perceptions of their functions (Gurr & Drysdale, 2013).

De Nobile (2018) classifies the functions performed by middle leaders into three categories: (1) functions related to student well-being such as counseling and monitoring performance, (2) administrative functions including managerial tasks, leadership responsibilities, and the implementation and revision of school policies, and (3) supervision and staff development including responsibilities related to teaching and learning, and capacity building. Similar categories were identified by Javadi et al. (2017) based on the results of their study on middle leadership at the level of heads of department (HoDs). Javadi et al. (2017) concluded that "the nature of HoDs'

responsibilities can be divided into four categories of academic, administrative, managerial and educative" (p. 478). The conceptual model developed by Pawlas and Oliva (2008) also recognizes supervisory functions related to three domains: instructional development, curriculum development, and staff development. In her proposed profile for instructional supervisors in Lebanese schools, Chmeissani (2013) identifies two categories of responsibilities: technical and cultural. The technical responsibilities include functions related to curriculum and instruction, professional development, human resources, and identifying problems and evaluating possible solutions; whereas the cultural responsibilities include functions related to community building, and to initiating and implementing change.

Contextual conditions are found to strongly shape the functions of middle leaders, and hence can impact both nature and scope of their responsibilities. Some scholars conducted studies in various types of schools (private, public, and international), and in different countries to identify contextual factors that impact middle leaders' functions. For example, Javadi et al. (2017) examined certain facets of middle leadership in four international schools in Malaysia including the role and responsibilities of middle leaders. The findings of this multiple case-study show inconsistent practices among the participating heads of departments. Javadi et al. (2017) concluded that the variations of these practices are mainly due to contextual factors such as: (1) the size of the school and the time given to HoDs to perform their functions, (2) the quality of relationship with the school principal that can favor or disfavor decision making at the level of the middle tier, and (3) the degree of teachers' resistance to change. The study by Lee et al. (2017) also shows that autonomy (functional and structural) is a major contextual factor that affects the functions of middle level leaders.

Lee et al. (2017) explain that a collaborative culture in a school can motivate practitioners, including middle leaders, and hence improve their performance. Similarly, the review by Harris et al. (2019) confirms that the autonomy of middle leaders can impact the nature as well as the scope of their responsibilities.

Contextual factors do not only influence the functions of middle leaders, but also the way they perform these functions. Depending on the school context, middle leaders adopt a combination of strategies such as managing relationships, leading teams, communicating effectively, managing time, and managing self to carry out the tasks associated with their functions (De Nobile, 2018).

Middle Leaders as Instructional Supervisors

The reviewed studies on middle leadership highlighted the importance of the instructional supervisory functions performed by middle leaders in school development (De Nobile, 2018; Gurr & Drysdale, 2013; Harris et al., 2019; Javadi et al. 2017; Pawlas & Oliva, 2008). This section presents support to this claim and explores some of the conceptual models described in the literature on instructional supervision to better understand the supervisory functions that are often assigned to middle leaders.

Importance of the Instructional Supervisory Functions of Middle Leaders

Functions assigned to middle leaders can vary with the conception of their role as well as with the school context. However, scholars agree that instructional supervision is a major function of these leaders (De Nobile, 2018; Harris et al., 2019). For instance, the results of the study by Javadi et al. (2017) show that among the different functions performed by the middle leaders participating in their study, instructional responsibilities have "top priority." Gurr and Drysdale (2013) also argue that teaching and learning, as well as curriculum are "the key domain areas of middle-

level leaders" (p. 67). Pawlas and Oliva (2008) explain that the responsibilities assigned to instructional supervisors mainly target the improvement of teaching and learning. Recent literature on middle leadership shows that middle leaders can positively affect the quality of teaching and learning and that they "play a pivotal role in securing better learning outcomes for students, as a result of their direct and positive influence on teachers' classroom practice" (Harris et al., 2019, p. 259).

Three Conceptual Models for Instructional Supervision

The literature on instructional supervision includes several models that frame the supervisory functions of middle leaders. This section will only consider three of these models. These were selected either because they can help in theorizing the research problem or because they resulted from studies done in a context similar to the context of this study. The three models conceptualize instructional supervision as a function that can be performed by members of the school community regardless of their position. This part of the review is used later to compare the study results to the different domains of supervisory functions represented in each of these models to construct a conceptual framework for this study.

The first model by Pawlas and Oliva (2008) classifies the supervisory functions into three domains: instructional development, curriculum development, and staff development. Based on this model, the instructional supervisor can take the role of a coordinator, group leader, consultant, and evaluator in each of the three domains. The role supervisors play varies based on their personal traits, the level of expertise of the teachers they work with, and the school culture and policies. Instructional supervisors derive expertise from a "repertoire of knowledge and skills" in areas such as curriculum and learning theories, sociology, instructional technology, management, and group

interaction. Considering “the large number of areas from which a knowledgeable and skilled supervisor must draw” (p. 24). Pawlas and Oliva (2008) argue for a specialized training program that can prepare them for their functions.

In the second model, Glickman et al. (2010) argue for a paradigm shift from the traditional approaches to instructional supervision, mainly associated with inspection and control to a more collegial approach focusing on teachers’ growth and collaboration in instructional improvement. According to his conceptual model, instructional supervisors rely on their knowledge, interpersonal skills, and technical skills to effectively perform two types of tasks: technical and cultural. Glickman et al. (2010) identified five technical tasks that can directly affect the teachers’ developmental levels, namely direct assistance of teachers, curriculum development, professional development, group development, and action research. Additionally, the three cultural tasks identified in this model, namely facilitating change, addressing diversity, and building community, can indirectly support teachers to perform at higher developmental levels. Besides, the knowledge base of instructional supervisors includes concepts like developing a plan for the school reform, understanding how adults learn, developing curricula, and teaching and learning theories. In addition to using technical skills like observing, planning, and evaluating through their different tasks, instructional supervisors rely on their interpersonal skills to promote positive relationships among teachers and to foster a culture of change. Gilckman et al. (2010) also believe that supervision mainly aims at building teachers’ capacity until they reach a level where they can “assume full responsibility for instructional improvement” (p. 192). During the process, instructional supervisors act as facilitator by adapting the supervisory approach to the developmental level of the teacher. Instructional supervisors can thus use a

directive control, directive informational, collaborative, or nondirective approach that best fits the expertise, commitment, and educational situation of individual teachers or group of teachers that are at the same developmental level.

The third model is proposed by Chmeissani (2013) as a profile for instructional supervisors grounded in the Lebanese context. This profile is built based on her review of relevant literature, and also according to the results of her study conducted in two private schools in Lebanon. The proposed profile accounts for four technical responsibilities related to curriculum and instruction, professional development, human resources, and problem solving; in addition to two cultural responsibilities, namely acting as an agent for renewal, and a community builder. According to Chmeissani (2013), the cultural tasks add a leadership dimension to the role of instructional supervisors, and hence individuals performing these tasks are referred to as instructional leaders. Instructional leaders play the role of coaches, and mentors in each of the responsibilities of the proposed profile. The proposed profile also describes the functions associated with each of the six responsibilities. Hence, as curriculum and instruction specialists, instructional leaders collaborate with teachers to examine the national curriculum, revise instructional programs, and make the necessary changes based on the school vision as well as the students' performance. Instructional leaders act as professional development specialists when they identify the needs of teachers and plan to build their capacities by developing on-going training programs and also by providing continuous support and follow up. As human resources specialists, instructional leaders thrive to motivate teachers, act as counselors for both individuals and groups of teachers and encourage open communication among all members of the school community. Instructional leaders are also inquirers and problem solvers who

help teachers identify problems in various areas including curriculum, instruction, and human relations, and they coach them to use action research to investigate and solve problems. Instructional leaders act as agents of renewal when they plan for the implementation of new initiatives that fit the school vision and encourage teachers to participate in developing and implementing the school vision to minimize resistance. As community builders, instructional leaders use approaches that can lead to the development of a learning community within the school and promote good relations with the external school community.

Each of these models clarifies specific aspects of instructional supervision that can guide the data collection and inform the discussion of the results in this study. In fact, the model by Pawlas and Oliva (2008) elaborated on the areas of content knowledge and on the skills that are considered as the foundation for successful supervision. These areas can later help the researcher determine the content of the induction program that best prepares middle leaders for their instructional supervisory functions. Besides the model by Gilckman et al. (2010) highlighted the leadership role of instructional supervisors by emphasizing their cultural responsibilities in addition to their technical tasks. Such classification (Technical and cultural) creates a general framework for the functions commonly assigned to the instructional supervisors, irrespective of the context. Finally, Chmeissani (2013) built on Gilckman et al. 's model and focused on breaking down each function into specific tasks that mirror the proposed profile of instructional supervision in Lebanese school.

Curriculum Supervision as a Function of Middle Leaders

In their model for successful school leadership, Gurr and Drysdale (2013) argue that middle leaders need to demonstrate competence in four key domains of

instructional supervision, namely assessment, curriculum, teaching, and learning to effectively act their role. Similarly, the review by De Nobile (2018) shows that effective leadership at the middle tier necessitates comprehensive and up-to-date knowledge of curriculum, pedagogy, and assessment. Sergiovanni and Starrat (2007) describe teaching, learning, curriculum and assessment as "interpenetrating realities to which supervisors must attend … to make sense of what is actually going on in classrooms" (p. 102).

Most of the reviewed studies on curriculum design and implementation highlight the need to involve multiple stakeholders at different levels of the system in the process, mainly middle leaders and teachers. According to Glickman et al. (2010), practitioners closest to students need to make convenient decisions about curriculum that best meet the needs of these students; however, curricula are often developed by specialists not involved in classroom practices.

Scope of Responsibility of Curriculum Supervision

Looking into the instructional supervisors' scope of responsibilities in developing a curriculum, Boukaert and Kools (2018) qualify instructional supervisors performing this function as curriculum transmitters, curriculum developers, and curriculum makers. Curriculum transmitters do not make any decision related to the content or sequence of the curriculum (Boukaert & Kools, 2018). They simply implement the formal curriculum through "systematic and close adherence to the scope and structure of a course book and accompanied pedagogical instructions" (Shawer, 2010, p. 598). While curriculum developers partly modify the content by changing the sequence, supplementing and deleting some topics (Shawer, 2010); curriculum makers can fully adapt the content of the curriculum for their subjects to fit the needs of their

students (Boukaert & Kools, 2018). They even “write curriculum aims, select and sequence content, use teaching strategies, and assess learning on the basis of a needs assessment of particular learners" (Shawer, 2010, p. 598). Although Boukaert and Kools (2018) argue for a continuum of approaches to curriculum instead of a “tripartite division”; the researcher refers to this classification of practitioners as transmitters, developers, and makers, to better understand the scope of responsibilities of the participants in this study.

The scope of responsibilities assigned under the curriculum related functions will also impact the purpose, content, organization, and format of the curriculum (Glickman et al., 2010). First, the curriculum development team needs to set the curriculum orientation for the school. In fact, a curriculum can be designed to: (1) transmit facts, skills, and values to students, (2) transact by considering students capable of constructing their own knowledge, or (3) transform by focusing on personal and social change (Glickman et al., 2010). Second, members of the curriculum team must agree on the content of the curriculum and for that purpose, they need to decide on: “(1) what should students learn? (2) what is the order of content for students to follow? (3) how is the learning to be evaluated?” (Glickman et al., 2010, p. 363). During the design phase, also instructional supervisors performing curriculum-related functions need to decide on the approach to organize the content that matches the purpose of the curriculum. In fact, curriculum organization can be discipline-based, interdisciplinary, or transdisciplinary (Glickman et al., 2010). Finally, curriculum leaders working on designing and developing the curriculum need to adopt a format to write the curriculum that best reflects its orientation. Glickman et al. (2010) identifies three common formats to write a curriculum: (1) behavioral-objective format based on “predetermined

knowledge and skills", (2) webbing format showing different activities connected to central themes, (3) results-only format where teachers are free to choose teaching methods and activities and are only held accountable for the results.

Curriculum-Related tasks

The scope of responsibilities of instructional supervisors ranging from transmitters to makers, determines the tasks they are expected to perform under their curriculum functions. According to Voogt et al. (2016), this process involves four stages: design, development, implementation, and evaluation. This section will describe some practices performed during the different stages of the process.

Design and Development. Instructional supervisors are expected to be knowledgeable about curriculum changes imposed by national and international agencies, and to adapt these changes to the needs of the students in their schools. They should also be capable of prioritizing curriculum changes in order not to overwhelm teachers (Gurr & Drysdale, 2013). Furthermore, instructional supervisors are responsible for creating or updating course material, applying new insights, enhancing consistency and coherence within the curriculum (Boukaert & Kools, 2018), in addition to supervising material writing during the development stage (Shawer, 2010). The collaboration among the members of the curriculum team, especially among teachers, encourages them to reflect on, and improve their practices. Hence teachers can have a better understanding of the change they are expected to transfer into their classes, and they will also develop an ownership of the school curriculum, which often results in a successful implementation (Voogt et al., 2016).

Studies conducted in the Lebanese context describe some curriculum related responsibilities performed by instructional supervisors, that are more limited in scope

compared to those described in Western literature. For instance, the results of the study by Ghamrawi (2013) in several private Lebanese schools show that the participants were relatively less involved in their function as curriculum specialist compared to their other functions as teacher leaders. The results of the study by Chmeissani (2013) also show that "the instructional supervisor does not design the curriculum; she only plans for its delivery and for managing its implementation" (p189). Chmeissani believes that this limited scope is due to the centralized structure of the schools and to the fact that national examinations strongly shape the content of the Lebanese curriculum.

Implementation and Evaluation. The supervisors and teachers are expected to work together to evaluate the content, the organization of the curriculum, as well as the way it is implemented (Glickman et al., 2010). The collaboration between instructional supervisors and teachers is not limited to the development and implementation stages; it also extends to the evaluation stage during and after implementation. Moreover, middle leaders performing instructional supervisory functions, rely on their vision of teaching and learning to guide curriculum implementation in their school (Gurr & Drysdale, 2013). In fact, they provide "operational guidance" to teachers to help them implement and evaluate curricular changes (Gurr & Drysdale, 2013). They also support teachers to use pedagogical strategies that best reflect the purpose of the curriculum and deliver its content (Shawer, 2010). Glickman et al. (2010) confirm that instructional supervisors need to adapt teachers' developmental level to the degree of their involvement in decision making related to how to implement and monitor curriculum change. They explain that "teachers will implement a curriculum successfully if they have been involved in its development and can adapt it to their specific classroom and school situation" (p. 378).

Instructional supervisors in Lebanese schools often assist teachers in implementing the school curricula and improving instruction; On the other hand, they were found to have a limited role in evaluating the curriculum (Chmeissani, 2013; Ghamrawi, 2013). The results of Chmeissani's study in two private schools show that the feedback given by the instructional supervisors "does not follow a systematic evaluation process and is not followed by latitude to take action to revise and improve this curriculum (p. 199).

Approach to Curriculum Design and Implementation

Defining curriculum intends to help both researchers and practitioners better understand the significance of its different elements. However, scholars use various definitions of curriculum and have little agreement on the development process of curricula (Dillon, 2009). Some curriculum models, and the foundations for curriculum design are briefly described in the following sections.

Curriculum Models. Contrasting curriculum-models will impact the way practitioners perceive a curriculum and how they plan for curriculum development and implementation (O'Neill, 2010). This section briefly summarizes the core ideas given by four of these models. For instance, Dillon (2009) argues that curriculum development and implementation must be guided by a set of questions that address three broad categories: the nature of a curriculum, its elements, and how it is practiced. While Ornstein and Hunkins (2017) describe curriculum design as the conceptualization and arrangement of four major components: objectives, content, learning experiences, and evaluation. Likewise, O'Neill (2010) summarizes the development process in four major steps: (1) identifying the learning outcomes, (2) developing the teaching and learning strategies, (3) designing the assessment methods, and (4) evaluating the curriculum.

Unlike other curriculum models, backward design shifts our thinking towards learning sought and evidence of desired learning before thinking about the teaching methods to get there (Wiggins & McTighe, 2005). Wiggins and McTighe (2005) describe a three-stage approach to backward design where designers identify first the desired goals and set priorities about what the learners must know and be able to do, then think of the evidence that confirm meeting the goals, and finally design the teaching practices that are conducive to the desired learning. Backward design is also known as understanding by design (UbD) for it involves describing specific evidence of understanding and deliberately planning teaching and learning for understanding (Wiggins & McTighe, 2005). Curriculum evaluation might not be considered as part of the design process; however, Wiggins and McTighe (2005) believe that "the key to excellent design is to try something, see how it works, and make adjustments" (p. 271).

Foundations of Curriculum Design. Regardless of the model adopted by curriculum leaders, Ornstein and Hunkins (2017) argue that four curriculum foundations usually inform the design process. They identify the following main foundations for a curriculum: philosophical, historical, psychological, and social foundations. Ornstein and Hunkins (2017) also explain how each foundation impacts curriculum development and implementation. They clarify that the national philosophy of education as well as the school philosophy provide curriculum workers with a framework for determining the curriculum goals, the educational experiences needed to meet these goals, and the means to evaluate these experiences. They also assert that "a knowledge of curriculum's history provides guidance for today's curriculum makers" (p. 29). In addition, psychology plays a crucial role in a curriculum since it explains how individuals learn, and it enhances the relation between teaching the curriculum and

learning it. Ornstein and Hunkins (2017) add that schools in general reflect both the culture of the larger society as well as its own ethos.

Middle Leadership in the Lebanese Context

The literature reviewed to contextualize the research problem includes seven studies conducted in Lebanese schools. It is worth mentioning that six of these studies were conducted in private Lebanese schools.

The studies aiming to explore instructional supervision and school improvement in the Lebanese context, contributed to identifying the role and functions of leaders at the middle tier in Lebanese schools. The researcher could not find a study conducted in Lebanon, that investigates middle leadership per say. Instead, the reviewed studies looked into building school capacity (Jureidini, 2018), the role and work context of school principals (Karami-Akkary, 2014), instructional supervision (Chmeissani, 2013; El Murr, 2015; Mattar, 2012), teacher leadership (Ghamrawi, 2013; Itani-Malas, 2019), and the experience of novice teachers (Hashem, 2018). However, the findings of each of these studies shed some light on certain aspects of middle leadership in the Lebanese context. The studies selected for this section do not only describe instructional supervision in a context similar to that of this study, but some of their findings inform the research problem of this study.

The findings of the reviewed Lebanese studies were not always in agreement with the western literature on middle leadership, and some of these studies revealed concepts unique to the Lebanese context. First, while the current Western literature shows interest in the leadership functions of instructional supervisors, research conducted in Lebanese schools demonstrates that instructional supervisors are still "over-loaded with managing and coordinating tasks" (Chmeissani, 2013**,** p. 208).

Furthermore, the findings of the study by Chmeissani (2013) reveal that instructional supervisors in the two purposefully selected Lebanese schools focus more on evaluating teachers than on creating a collaborative culture that support professional development and change. El Murr (2015) came to a similar conclusion based on the results of her study. In fact, teachers participating in El Murr's study associated promoting teachers' professional learning with the proficiency of instructional supervisors, their availability, the regular feedback they provide, and that they take teachers' professional needs into consideration. However, these participants ignored two factors that favor teachers' learning and that are frequently discussed in Western literature, namely creating a professional learning community and training instructional supervisors in "supervisory and leadership practices". The study by Hashem (2013) also shows that novice teachers in some Lebanese schools receive limited support from their supervisors. She identifies unique areas related to instructional supervision that challenge the work of novice teachers in Lebanese schools, that were not found to characterize holders of these functions mentioned in western literature, namely "lack of support in dealing with disciplinary problems, lack of mentorship, and overloading novice teachers with task assignment" (p. 164). Second, the reviewed studies conducted in some Lebanese schools describe a directive approach offered by instructional supervisors to monitor the work of teachers (Chmeissani, 2013; Hashem, 2013) as well as limited availability and inconsistency in communicating feedback (El Murr, 2015; Hashem, 2013) in contrast to the collaborative supervisory models described in current Western literature. Lastly, the reviewed Lebanese literature shows that technical responsibilities dominate the functions of instructional supervisors, unlike the models described in the western literature where instructional supervisors also focus on various cultural tasks. Studies

that explored the challenges faced by teachers reveal the absence of these cultural tasks. For instance, the study by Hashem (2013) shows that novice teachers face challenges related to their relationship with students, parents, colleagues, and superiors. Hence, they lacked the coaching that instructional supervisors must offer on how to develop their interpersonal skills. Furthermore, instructional supervisors were found to struggle with creating a culture of trust and respect among all members of the school community (Ghamrawi, 2013). Similarly, Chmeissani (2013) argues that Lebanese instructional leaders are short on promoting "trust and collegiality among the teachers and between the instructional leaders and the teachers" (p. 220).

Additionally, the recommendations of these studies identify certain actions to be taken at the level of the school or even at the level of the Ministry of Education and Higher Education (MEHE) to enable instructional leaders to positively impact teaching and learning in Lebanese schools. Providing specialized training for principals, middle leaders, and teachers is a common recommendation for the reviewed studies conducted in Lebanese private and public schools. For example, Mattar (2012) recommends that MEHE organize specific programs to prepare school principals for their supervisory functions and to further develop their leadership skills. Pre-service training aiming to develop instructional leaders' practices, skills, and behaviors was a major recommendation in El Murr's (2015) study. She even suggests that "schools adopt practical policies, procedures, and certain structural considerations, which will serve to guide how professional learning is designed and implemented" (p. 264). A similar recommendation was offered by Itani-Malas (2019) based on her research findings. She emphasizes that any program aiming to build leadership capacity "cannot happen in vacuum", it should be part of school-wide reform to change the norms in Lebanese

schools towards more distributive leadership. Chmeissani (2013) also argues for providing the training needed for instructional leaders to become more proficient in their different responsibilities and mainly those related to their cultural functions. Likewise, Ghamrawi (2013) suggests that schools rethink the preparation of subject leaders and that they provide them with training programs about the different tasks they are expected to perform. In her action plan for sustaining school improvement, Jureidini (2018) also recommends forming and training a team of middle leaders (coordinators and lead teachers) to develop professionally to effectively lead and monitor school improvement. Similarly, Hashem (2013) suggests that schools provide support to novice teachers by "adopting structured and well-designed induction programs that can facilitate the transition of novice teachers into the teaching profession" (p. 195). Hashem (2013) adds that principals and coordinators need to be trained on how to design and implement such induction programs to effectively lead and monitor this task.

In addition to ensuring the appropriate training for instructional supervisors, several Lebanese researchers whose studies were reviewed also recommend that schools in Lebanon provide adequate resources to support the work of instructional supervisors, mainly by giving enough time for collaboration (Chmeissani, 2013; Ghamrawi, 2013; Jureidini, 2018) and sufficient funding (Jureidini, 2018). Lastly, schools need to grant instructional leaders more authority to "participate in the decision-making process especially in those decisions that have a direct impact on the instructional process" (Chmeissani, 2013, p. 220).

Conclusion

Research has made it clear that middle leaders play a major role in school improvement (e.g., Chmeissani, 2013; De Nobile, 2018; Gurr & Drysdale, 2013). They

were also found to perform most of the instructional supervisory functions (e.g., Ghamrawi, 2013; Harris & Jones, 2017; Javadi et al., 2017). Furthermore, the reviewed literature on middle leadership recognizes that middle leaders have a complex role associated with hybrid responsibilities including teaching, management, and leadership, and that their role is strongly shaped by contextual conditions (e.g., De Nobile, 2018; Gurr & Drysdale, 2013; Harris et al., 2019; Javadi et al., 2017).

To effectively act their role as instructional supervisors, middle leaders need to demonstrate competence in certain domains including curriculum and instruction. In this regard, the reviewed literature identifies three levels for the instructional leaders' scope of responsibilities in supervising curricula; they can be curriculum transmitters, curriculum developers, and curriculum makers. The scope of responsibilities assigned to instructional supervisors will impact the tasks they are expected to perform during the curriculum design process that involves four stages: design, development, implementation, and evaluation. (e.g., Boukaert and Kools, 2018; Glickman et al., 2010; Voogt et al., 2016).

Three conceptual models on instructional supervision were reviewed to derive the dimensions that frame this study and that inform the development of the proposed induction program. First, the foundations of the supervisory model by Pawlas and Oliva (2008) are used to inform the areas of content knowledge and the skills to be covered by the proposed induction program aiming to prepare middle leaders for their supervisory functions. Second, the cultural responsibilities as identified in Gilckman et al.'s (2010) model emphasize the leadership aspect of the role and guide the approach and practices of the induction program. Finally, the responsibilities related to curriculum and instruction, and supporting teachers as listed by Chmeissani (2013) in her proposed

profile for instructional supervisors can be compared to those described by the participants in this study to contextualize their professional needs.

Challenges Faced by Middle Leaders

Based on the reviewed studies, middle leaders performing instructional supervisory functions in the Western and Arabic contexts, face common challenges; however, the contextual factors often determine to what degree these challenges can hinder the functions of middle leaders. The challenges identified by researchers are mainly related to the ambiguity of their role and the lack of agreement on their functions (De Nobile, 2018; Harris et al., 2019; Itani-Malas, 2019; Pawlas & Oliva, 2008; Sergiovanni & Starratt, 2007), the complexity of the tasks they are expected to perform (Chmeissani, 2013; Ghamrawi, 2013; Harris et al., 2019; Irvine & Brundrett, 2016; Itani-Malas, 2019; Zepedaet al., 2014), some contextual factors that hinder their functions (Chmeissani, 2013; Drago-Severson, 2004; Jureidini, 2018; Lee et al., 2017), and the lack of training on the tasks they need to perform (Chmeissani, 2013; El Murr, 2015; Gurr & Drysdale, 2013; Irvine & Brundrett, 2016; Jureidini, 2018).

Ambiguity in the Role and Functions

Middle leaders often face obstacles related to their unclear role as instructional supervisors (Irvine & Brundrett, 2016) and their functions that are not always well defined (Sergiovanni & Starratt, 2007), especially at the early stages of their appointment. The review of published studies on middle-level leaders by De Nobile (2018) reveals some ambiguities about “who they are and what they do” (p. 394). Moreover, it is difficult to delineate the functions of middle leaders because of the “porous boundaries” between the different roles occupied by instructional leaders (Irvine & Brundrett, 2016). Sergiovanni and Starratt (2007) also advance that

supervisory tasks can be performed by individuals who do not formally have this function, which could lead to overlapping functions and conflicting practices within the same school.

Contextual Factors Hindering Instructional Supervisory Functions

Implementing the complex tasks (Pawlas & Olivas, 2007) assigned to middle leaders performing instructional supervisory functions can be hindered by context specific conditions (Chmeissani, 2013; Drago-Severson, 2004; Irvine & Brundrett, 2016). The Middle Leadership in School model (MLiS-model) developed by De Nobile (2018) identifies personal and organizational factors such as principals' support, school culture, professional development, enthusiasm, and knowledge of curriculum, pedagogy, and assessment as the main "inputs" that can favor or limit the success of middle leaders in performing their functions. De Nobile (2018) also clarifies that a school culture that promotes participative decision making and encourages collegiality can support middle leaders and reduce resistance to change.

Some scholars in the West were interested in analyzing context specific obstacles facing instructional supervisors. For example, Drago-Severson (2004) identifies some conditions that can hinder the functions of instructional supervisors such as: a school size that overloads instructional supervisors, a school mission that is not clearly disseminated among community members, adult resistance to change, and limited resources provided by the school. By resources, Drago-Severson does not only refer to financial resources, but also to the time provided to accomplish the tasks assigned to these instructional supervisors, as well as the individuals with whom they collaborate. Irvine and Brundrett (2016) confirm the hindering effect of most of the factors identified by Drago-Severson (2004). They also advance that ill-defined school

expectations can be considered as additional factors that challenges the functions of middle leaders performing instructional supervisory functions.

Similar research conducted in Lebanese schools confirms most of the contextual factors identified by researchers in the West, and also recognizes more factors that can shape the supervisory functions of middle leaders, and that are specific to the Lebanese context. In fact, Chmeissany (2013) found that the lack of trust between the instructional supervisor and teachers, a school culture that does not favor collegiality at the workplace, and limited support for the instructional supervisor by the administration can hinder their supervisory functions. The results of the study by Jureidini (2018) confirm that lack of time for "collaboration and innovation," rushed implementation of school initiatives, teachers that resist change, and lack of sufficient funding, can impede supervisory functions, thus hindering building schools' capacity for improvement.

Lack of Training

The lack of adequate training was found to be a major factor limiting the ability of middle leaders to effectively act their role (Gurr & Drysdale, 2013; Hashem, 2013; Irvine & Brundrett, 2016). In fact, all the reviewed studies on instructional supervision agree that instructional leaders should receive on-going training and that the programs intended to build their capacity must take into consideration their professional needs as determined by their functions in the school context (Mattar, 2012; Ng & Kenneth-Chan, 2014; Thorpe & Bennet-Powell, 2014). Irvine and Brundrett (2016) describe the role of middle leaders as demanding since most of them started as teachers and were not prepared for this role. Gurr and Drysdale (2013) describe a similar trend commonly adopted in schools where successful teachers are considered as candidates for middle leadership positions; but too often preparation for the new functions are not provided.

Besides, when middle leaders are offered professional training, they rarely receive targeted training and end up attending principals' professional development sessions or professional development programs intended to train teachers (Zepeda et al., 2014).

Furthermore, scholars agree that middle leaders need to receive on-going training to be able to assimilate into their role and be prepared to face the rapid development in the field of education (Ng & Kenneth-Chan, 2014). Nevertheless, when relevant professional development is not provided, middle instructional leaders are left alone to learn on the job (Gurr & Drysdale, 2013). In addition, even when professional development is offered, Thorpe and Bennet-Powell (2014) assert that middle leaders might not benefit from "one-size fits all" training programs, because these leaders have different professional needs depending on their functions, and on the school context. Similarly, Irvine and Brundrett (2016) assert that "middle leadership development programs should be built around the established needs of emergent middle leaders, taking into account the context in which they operate" (p. 91). The results of their study show that supervision requires specific skills that can be developed through leadership training programs.

The lack of professional development programs for middle leaders performing instructional supervisory functions is a bigger concern in the Lebanese context. For instance, none of the instructional supervisors participating in El Murr's (2015) study confirmed attending any training to develop their supervisory and leadership skills. The study by Hashem (2013) reports that the lack of training of coordinators is one of the challenges facing newly appointed teachers. Based on the results of her study, Hashem (2013) concludes that most instructional supervisors in the participating schools "are not equipped with the skills and expertise needed for them to be resourceful references for

their teachers in general and newcomers to the profession in particular"(p. 190). The study by Chmeissani (2013) also shows that professional development is one of the contextual factors that impact the role of instructional supervisors. She also recommends supporting instructional supervisors to develop professionally and to acquire the knowledge and skills needed to perform the various tasks listed in her proposed profile for instructional leaders in the Lebanese context. Similarly, Ghamrawi (2013) emphasizes the role played by subject leaders in developing teacher leadership and recommends training these middle leaders on the different tasks related to their functions. Mattar (2012) also proposes on the job training for school leaders in two major areas: curriculum and leadership.

Preparing Middle Leaders

School leaders' effectiveness is often tied to their preparation. However, most of the traditional university programs aiming to prepare school leaders are "described as ineffective, too theoretical, and managerially focused" (Zepeda et al., 2014, p. 297). Furthermore, programs intended to prepare school leaders do not always agree on the knowledge, skills, and attitudes that these leaders must possess to successfully perform their role (Achille & Romey, 1990; Bassett & Shaw, 2017). Most school leaders in the West, mainly principals, join such programs before they are appointed to their new position. This form of pre-service training is often course-based, and it is offered by institutions of higher education (Achille & Romey, 1990; Gerrevall, 2018). Pre-service preparation programs are mainly criticized for not taking into consideration the diversity of the needs of the prospective school leaders who will be holding various positions such as principals, assistant principals, coordinators, and heads of departments (Achille & Romey, 1990). Achille and Romey (1990) add that practitioners' preparation

does not end with the completion of the pre-service programs, they need further support to adequately perform their new functions, and this is often ensured through in-service preparation programs.

Recognizing the importance of instructional supervisors' preparation, scholars attempt to achieve the effectiveness of this practice to serve diverse contexts. Hence, researchers examined job-embedded professional development (Cunningham & Hillier, 2013; Guskey & Yoon, 2009; Ng & Kenneth-Chan, 2014; Zepeda, 2015) professional development as a form of adult learning (Drago-Severson, 2011; Totter, 2006; Zepeda et al., 2014) informal learning (Cunningham & Hillier, 2013), and authentic professional learning (Webster-Wright, 2009; Zepeda, 2015).

According to Glickman et al. (2010), scholars may not agree on all factors leading to successful preparation programs, however they recognize some common characteristics of these programs such as involvement of participants in planning, adherence to the principles of adult learning, relevant and job-embedded, professional development focused on the needs of practitioners, collegiality and collaboration, active learning, and ongoing evaluation and feedback.

Finally, it is important to mention that the reviewed literature revealed a scarcity of studies targeting preparation programs for middle leaders. As a result, the researcher reviewed literature on preparation programs for school principals, professional development of instructional supervisors, and induction programs of teachers and principals. It is also necessary to specify that for the rest of this section, the researcher will use the term "professional development" as synonymous to in-service preparation because it is recurrently used in most of the revised studies.

Design Characteristics of Effective Professional Development Programs

International literature provides guidance on how to design effective professional development programs. For instance, Webster-Wright (2009) argues that authentic professional learning should be the foundation for effective professional development. She also describes professional learning as "continuing, active, social, and related to practice". The results of the study by Al-Kiyumi and Hammad (2020) also show that “supervisors’ professional development programs must combine theoretical and practical knowledge” (p. 3). Likewise, El Murr (2015) argues that effective professional development is planned, continuous, tailored to the needs of the targeted practitioners, and based on the principles of adult learning. Moreover, Boavida et al. (2016) assert that capacity building becomes more effective as professionals get actively involved in the training experience. For the purpose of this study the capacity of middle leaders refers to the competences and skills (Drago-Severson, 2004; Irvine and Brundrett, 2016; Javadi et al., 2017) that enable them to successfully perform their instructional supervisory functions.

The reviewed literature reveals certain characteristics for effective professional development programs intended to prepare instructional supervisors. First, the proposed program must address the needs of the participants within the context of their schools (Bassett & Shaw, 2017; Chmeissani, 2013; Ghamrawi, 2013; Glickman et al., 2010; Guskey & Yoon, 2009; Irvene & Brundrett, 2016; Jureidini, 2018; Pawlas & Oliva, 2008; Ng & Kenneth-Chan ,2014; Thrope & Bennet-Powell, 2014; Zepeda et al., 2014). Second, it should follow an approach and adopt practices aligned with the way adults learn (Bassett & Shaw, 2017; Drago-Severson, 2011; Glickman et al., 2010; Knowles et al., 2005; Merriam, 2001; Totter, 2006; Zepeda, 2015). Third, the program must be

designed using an effective curriculum-model (Ornstein & Hunkins, 2017; Wiggins & Mc Tighe, 2005).

Needs Based

Most of the revised studies recommend that professional development programs address the needs of middle leaders (Guskey & Yoon, 2009; Thrope & Bennet-Powell, 2014) to support them in performing their technical and cultural functions (Chmeissani, 2013; Glickman et al. 2010), while taking into consideration the contextual factors (Zepeda et al., 2014). Therefore, it is of paramount importance to identify site-based professional needs of the middle leaders before designing the professional development programs intended to prepare them for their different instructional supervisory functions (Irvene & Brundrett, 2016; Ng & Kenneth-Chan, 2014). Zepeda et al. (2014) also argue for training programs that "take into account the needs of the system, the site in which participants lead, and the outcomes that are articulated" (p. 312). When designing professional development programs, the needs of the system should not dominate the professional needs of instructional supervisors. However, research by Basset and Shaw (2017) shows that most of the leadership development programs they examined "focused on the needs of the school rather than the needs of the leaders" (p. 78).

Some researchers identified specific areas in which instructional supervisors need further support. For instance, Ng and Kenneth-Chan (2014) examined the professional needs of middle leaders performing instructional supervisory functions in in Hong Kong. They concluded that professional development programs must: (1) provide instructional supervisors with opportunities to adapt theories related to teaching and learning to classroom activities within the context of their schools, (2) further develop their interpersonal skills, and (3) train them on resources management. On the

other hand, Guskey and Yoon (2009) believe that professional development programs should mainly address two areas: data-driven decision making, and action research. The needs identified by these researchers fit into the areas of knowledge and skills described in the instructional supervisory model by Pawlas and Oliva (2008). Addressing these needs can also support instructional supervisors to successfully perform most of their technical and cultural functions as described in the models by Glickman et al. (2010) and by Chmeissani (2013).

Studies conducted in the Lebanese context confirm that middle leaders performing instructional supervisory functions must further develop their knowledge and skills in all the areas identified by researchers in the West. For instance, Ghamrawi (2013) invites decision makers in Lebanese schools to rethink the preparation of subject leaders before they are appointed to this position. She also suggests professional training on specific practices that mainly target the cultural functions of instructional supervisors such as: contributing to positive school culture, adopting democratic leadership styles, and encouraging professional collaboration. Jureidini (2018) also asserts that to sustain school improvement, both school leaders and teachers need to further develop "inquiry skills, data-driven decision-making, reflective dialogue and practice, evolving design planning, professional collaboration, and de-privatization of practice" (p. 159). Moreover, Chmeissani (2013) recommends that schools plan special professional development sessions for instructional supervisors to support them in the role dimensions described in her proposed profile. She suggests on-going training for instructional leaders that focus on collegial relationship, collaborative work to improve teaching and learning, and shared decision making.

Approach and Practices Aligned with how Adults Learn

Learners in general, and adult learners in particular, have different ways of learning. Adults make sense of what they learn based on their personal experience (Drago-Severson, 2011; Totter, 2006); they are self-directed learners who seek immediate utility of their learning (Totter, 2006; Zepeda, 2015).

Researchers like Glickman et al. (2010), Totter (2006), and Zepeda (2015) assert that the principles of adult learning must constitute the foundations for effective professional development programs designed to prepare instructional supervisors. Therefore, principles emerging from the reviewed adult learning theories informed the design of the induction program intended to prepare the middle leaders performing instructional supervisory functions in the school under study. The following sections will give a brief background on how the study of adult learning has evolved, and how its principles shape effective professional learning.

Understanding Adult Learning. Researchers and practitioners involved in designing preparation programs for school leaders need to understand how adults learn; however, the current knowledge base on adult education is a "mosaic of models and principles" (Merriam, 2001). Hence it is useful to start with a brief description of how the field of adult education evolved and to focus on the main theories that contributed to our current knowledge of adult learning.

Adult learning was founded as a professional field of practice almost 100 years ago, and scholars at that time were mainly interested in whether adults could learn (Merriam, 2001). Later, the focus shifted towards the particularity of adult learning compared to pre-adult schooling (Merriam, 2001). The need to sustain practitioners' professional growth encouraged scholars to further develop their knowledge base on

how adults learn and to build theories to conceptualize their research (Merriam, 2001). Three of these theories have mainly marked the field of adult learning, and their principles are briefly described in the section below.

One of these theories is Knowles' "Andragogy", defined by Merriam (2001) as "the art and science of helping adults learn" (p. 5). Knowles' model is based on six assumptions regarding adult learners: (1) they only learn what they consider important, (2) they perceive themselves as independent learners, (3) their prior experience affects what and how they learn, (4) their learning needs are determined by real-life situations, (5) their motivation to learn is job-related, and (6) their learning is task-oriented for they seek direct application of what they learn (Knowles et al., 2005). Andragogy contributed to the professionalization of adult learning, yet Knowles' theory is criticized for neglecting the fact that the learning of practicing professionals also needs to match the work environment (Merriam, 2001).

Brookfield's "Critical Reflectivity" is another concept that shapes the current knowledge on adults learning. According to Brookfield's model, adults need support in developing their competence in critical reflectivity to change the way they think about themselves in their occupational world (Knowles et al., 2005). Zepeda (2015) confirms that critical reflection leads to sense-making, which is a major stream in how adults learn. Brookfield's model overfocused on reflective practice at the individual level. In fact, professional growth necessitates that practitioners "participate in a continuous cycle of collaborative activity and reflection on that activity" (Glickman et al., 2010, p. 60).

The third conceptual model that also marks the field of adult learning is Kolb's model known as the "Experimental Learning Cycle". This model describes the learning

process as a cycle with four stages: experiencing, reflecting, thinking, and acting. Kolb's model relates development to experience and considers the learning process as holistic since it engages the individual's affective, perceptual, cognitive and behavioral domains (Knowles et al., 2005). Most of the reviewed studies agree that adults use their prior experience as a foundation for professional growth, and hence they confirm the centrality of experience to adult learning (Drago-Severson, 2011; Glickman et al., 2010; Totter, 2006; Zepeda, 2015).

Various principles related to adult learning emerged from the models developed by Knowles et al. and by other scholars. The section below will explain how to refer to these principles when designing and evaluating training programs for practicing professionals.

Applying Adult Learning in Professional Development. Drago-Severson (2004) maintains that training programs should focus more on how professionals learn than on what they learn. The reviewed literature on professional development shows that effective programs often follow an approach that is aligned with how adults learn. The principles of adult learning must also provide the foundation for instructional supervisors' professional development practices (Zepeda et al., 2014). Actually, when describing effective professional development that mirrors adult learning, most of the reviewed studies describe job-embedded (Bassett & Shaw, 2017, Cunningham & Hillier, 2013; Webster-Wright, 2009; Zepeda, 2015) and on-going training (Guskey & Yoon, 2001; Webster-Wright, 2009) that promotes action-based learning (Al kiyumi & Hammad, 2020; Drago-Severson, 2011), and that provides opportunities for self-directed learning (Totter, 2006; Zepeda, 2015).

Effective professional development is found to encompass creating job-embedded learning opportunities that encourage adults to reflect on their practices and thus develop a newer understanding of their work experience (Zepeda, 2015). Webster-Wright (2009) maintains that job-embedded experiences also favor authentic learning and sustain the development of practicing professionals who are continuously involved in innovative practices derived from the school environment. Cunningham and Hillier (2013) highlight the importance of informal learning in the workplace and that middle leaders are "constantly picking up additional skills, knowledge, and ideas in informal settings" (p. 37). According to Zepeda (2015) there are two types of job-embedded learning: formal and informal, and both types can support practitioners as they pilot new practices and develop new skills. However, practicing instructional supervisors consider informal learning activities to be more relevant since they directly respond to their professional needs (Cunningham & Hillier, 2013). Similarly, Bassett and Shaw (2017) state that “much of the learning and development of the middle leaders are gained from doing the job and working with their peers” (p.758). Adapting a job-embedded approach to professional development resonates with Knowle’s idea that adults are more motivated to learn concepts and skills related to their jobs

Successful professional development programs also adopt an approach that encourages on-going support, and that requires some follow up to help instructional supervisors adapt new practices to the school setting. Webster-Wright (2009) asserts that on-going job-embedded professional development enhances professional learning, updates practices and maintains high-quality performance of professionals. Drago-Severson (2011) also argues that sustaining professional growth necessitates creating on-going opportunities for authentic learning. On the other hand, Guskey and Yoon

(2009) add that school leaders should provide time for "significant amounts of structured and sustained follow-up after the main professional development activities" (p. 497). This assertion is in agreement with Brookfield's description of "critical reflection" as an on-going learning process leading to sustainable growth. Similarly, Zepeda et al. (2014) affirm the need to shift from the traditional sit and get method of training to a job-embedded and action-based form of professional development.

In fact, Drago-Severson (2011) describes professional learning as "learning labs" in which practicing professionals get involved in experimental and active learning. Based on their review of literature, Al-Kiyumi and Hammad (2020) also stress fieldwork as an approach to prepare instructional supervisors. These descriptions of professional learning emphasize "experiencing and acting", considered as two necessary phases in Kolb's learning cycle.

Adult learners develop self-motivation as they plan their own professional path. They often focus on topics that are relevant to their functions, and that can be directly applied in their own school (Totter, 2007). Zepeda (2015) states that effective professional development programs take into consideration that adults seek opportunities for self-directed learning. She also maintains that the level of readiness to learn is dependent on the direct need of the learner, and that adults develop satisfaction as they grow professionally which creates an intrinsic motivation to on-going learning. Zepeda's understanding of effective professional development, as well as Totter's description for professional growth are aligned with Knowles' assumptions regarding the readiness to learn, and adults as independent learners.

Furthermore, professional development practices must be selected to fit the school context, and the job setting (Zepada, 2015). Guskey and Yoon (2009) state that

“effective professional development comes not from the simple implementation of a particular set of best practices, but from the careful adaptation of varied practices to specific content, process, and context elements” (p. 497). Successful professional development programs described in the reviewed literature agree that practices that involve peer coaching (Lochmiller, 2014; Zepeda, 2015), and that encourage collaboration withing professional learning communities (Al kiyumi & Hammad, 2020; Sergiovanni & Starrat, 2007; Zepeda, 2015) allow for the adaptation of supervisory practices to a specific context. According to Lochmiller (2014) instructional supervision is “highly contextualized”, thus peer coaching is “uniquely suited” to support school leaders during their preparation programs. When using peer coaching for professional growth, the designers of preparation programs need to remember that coaching must be: (1) embedded in the daily work of practitioners, (2) differentiated, and (3) developmental (Zepeda, 2015). Furthermore, Al-Kiyumi and Hammad (2020) advance that forming learning communities is one means to support instructional leaders during their professional development. According to Sergiovanni and Starrat (2007) one way to support instructional supervisors is by encouraging them to be part of collaborative teams where they can share their practices and assume more responsibility of their learning. For example, joining study groups is a form of active learning that encourages peer’s interaction. Participants in study-groups often chose topics relevant to their functions and hence show motivation to collaboratively learn (Zepeda, 2015). Encouraging action research is another practice to create professional learning communities within a school. Unlike the traditional professional development practices, action research-based practices assume that practitioners have reliable professional knowledge; however, they need a learning context to help them generate new

knowledge, monitor a new action, and evaluate and modify practices as needed (McNiff, 2002; Zepeda, 2015).

Based on a Clear Curriculum Design-Model

Professional development programs intended to prepare middle leaders, must be guided by a curriculum design-model in order to be well structured and also to ensure coherence between content, approach and practices.

The reviewed literature on curriculum design reveals different models that were discussed in a previous section on the functions of middle-level leaders. Regardless of the model adopted to develop a professional development program, four curriculum foundations namely philosophical, historical, psychological, and social foundations, usually inform the design as well as the implementation process (Ornstein & Hunkins, 2017). These foundations can inform the choice of the appropriate content, approach, and practices to support the middle leaders in sustaining school improvement, and to understand how this change will affect the school community. In fact, the design characteristics of any program developed to train practitioners in a school, must be aligned with the school philosophy. Furthermore, before developing a professional development program for the instructional supervisors in a school, it is useful to have some information about previous training they have received, and to get their feedback on how it contributed to their growth. The training process should also consider the affective needs of instructional supervisors in addition to their learning styles. Finally, when designing a professional development program, it is important to remember that schools in general reflect both the culture of the larger society as well as its own ethos (Ornstein & Hunkins, 2017).

Different curriculum models agree on the major steps of the design process. However, some of these models strongly disagree on the order of these steps, mainly on the initial step. In fact, when adopting the backward design model, or UbD-model as described by Wiggins and McTighe (2005), instructional supervisors start by analyzing the needs of the learners and the tasks they are expected to perform in order to agree on the objectives that will direct the process, as well as the standards to monitor the quality of teaching and learning (Ornstein & Hunkins, 2017). In a similar way, the induction program intended to prepare middle leaders performing instructional supervisory functions in the school under study, must start by exploring the major obstacles faced by the middle leaders when they transition into their new role as well as their perceived professional development needs before designing the training program.

Induction Program for Middle Leaders

Induction is a means for in-service preparation of novice professionals (Gerrevall, 2018; Lochmiller, 2014). The primary purpose of induction programs is to facilitate the transition into professional practice (Gerrevall, 2018). In fact, these special in-service programs allow a period of "professional and organizational socialization" needed by novice practitioners to successfully assume their role (Lochmiller, 2014). Gerrevall (2018) argues that "induction programmes tend to be formative and supportive in nature" (p. 632), which helps practitioners to cope at the early stages of their professional life. The participants in this study are old timers in the school with a significant teaching experience; however, they are novice to the role of instructional supervisors. The reviewed empirical studies exploring the preparation of teachers (Gerrevall, 2018; Hashem, 2013), middle leaders (Bassett & Shaw, 2017), and principals (Lochmiller, 2014) recommend induction programs to prepare novice

practitioners and also to support experienced practitioners as they assume new functions.

Characteristics of Effective Induction Programs

The reviewed literature shows that successful preparation of practicing professionals necessitates a well-developed program that addresses the needs of the targeted practitioners and that uses delivery methods aligned with the principles of adult learning (Guskey & Yoon, 2009; Irvene & Brunderrett, 2016; Zepeda, 2015). Similarly, the intended induction program must have certain design principles to successfully prepare middle leaders for their new supervisory role. Effective induction programs are planned so as: (1) practitioners have an active role in their professional development by setting their needs and contributing to designing the practices, (2) to allow for supervised implementation of in-service activities in the school-setting, and (3) to provide on-going support and feedback (Sergiovanni & Starrat, 2007). Furthermore, an induction program must have relevant content and delivery method, and also maintain a balance between theory and practice (Al-Kiyumi & Hammad, 2020). Moreover, the relevance of the content of induction programs is determined by the extent to which it addresses the needs of instructional supervisors as well as the needs of the system. According to Lochmiller (2014) effective induction programs for school leaders must focus on their needs and provide support in a relevant context.

Components of Induction Programs

Induction programs are often criticized due to inadequacies in their frequency, scope, content, and delivery method (Gerrevall, 2018; Lochmiller, 2014; Al-Kiyumi &Hammad, 2020). In fact, Bassett and Shaw (2017) suggest that schools implement an induction program for their middle leaders “which focusses specifically on their unique

roles and challenges" (p.758). Furthermore, Gerrevall (2018) recommends developing the supportive dimension of induction.

Glickman et al. (2010) describe three stages for effective professional development programs which can be adopted to design instructional supervisors' induction programs: orientation, integration, and refinement. The orientation stage addresses the responsibilities and concerns of practicing professionals, as well as the expected benefits from joining induction programs. This is when practitioners receive basic knowledge and skills that they can later apply in authentic work conditions (Glickman et al., 2010). Based on the reviewed literature, induction programs that stop at this stage and do not encourage practitioners to implement and evaluate their learning are often described as ineffective (Al-Kiyumi &Hammad, 2020; Glickman et al., 2010; Lochmiller, 2014). During this stage, workshops and seminars are offered to address areas of content knowledge and skills identified by Pawlas and Oliva's (2008) instructional supervisory model, and that match specific needs of the inductees.

In the integration stage, instructional supervisors apply knowledge and skills as they perform their technical and cultural functions described in Chmeissani's (2013) and Glickman et al.'s (2010) models. Instructional supervisors need on-going support during this stage to be able to successfully adapt previous learning to fit their school context. During the integration stage, inductee gradually build their "repertoire" of successful strategies (Glickman et al., 2010). The scope and duration of this phase varies according to the developmental level of instructional supervisors (Glickman et al., 20110). Mentoring is a commonly used induction strategy to supports leaders as they are implementing newly acquired knowledge and skills (Lochmiller, 2014).

During the refinement stage, instructional supervisors reflect on and improve their practices. Compared to when they first started the induction program, instructional supervisors are now functioning at a higher developmental level (Glickman et al., 2010). This stage is mainly based on "continuous experimentation and reflection" (Al-Kiyumi & Hammad, 2020). In fact, professional learning communities encourage practitioners to reflect on their responsibilities and how they perform the different tasks associated with these responsibilities (Gerrevall, 2018). Learning communities also enhance collaboration among practitioners and recognize that these practitioners have different developmental levels and hence they grow at different rates (Sergiovanni & Starrat, 2007). Itani-Malas (2019) also recommends forming professional learning communities to encourage practitioners' collaboration and to help them develop a growth mind-set.

Chapter Summary

Having reviewed the literature on middle leadership and instructional supervision, it is clear that middle leaders are mainly assigned instructional supervisory functions related to curriculum, teaching, and learning (e.g., Chmeissani, 2013; De Nobile, 2018; Ghamrawi, 2013; Harris & Jones, 2017; Javadi et al., 2017). The complexity of their tasks, the lack of effective preparation, and some context related factors were found to be major obstacles that hinder them from effectively performing their functions, especially when they transition into their new role (e.g., Glickman et al., 2010; Irvine & Brundrett, 2016; Jureidini, 2018; Sergiovanni & Starratt, 2007).

School leaders' effectiveness is often tied to their preparation (Zepeda et al., 2014). Empirically, professional development programs were found to be effective when they address the needs of the participants within the context of their schools,

follow an approach and adopt practices aligned with the way adults learn, and are designed using a convenient curriculum-model (e.g., Bassett & Shaw, 2017; Guskey & Yoon, 2009; Ornstein & Hunkins, 2017; Zepeda et al., 2014). Literature on in-service preparation also supports the notion that successful induction of practicing professionals necessitates a well-developed program that addresses the needs of the targeted practitioners and that uses delivery methods aligned with the principles of adult learning (e.g., Guskey & Yoon, 2009; Irvene & Brunderrett, 2016; Zepeda, 2015). Glickman et al. (2010) describe three stages for effective professional development programs which can be adopted to design instructional supervisors' induction programs: orientation, integration, and refinement. In this regard, literature on in-service preparation shows that the content and the approach of an induction program at each of these stages, needs to be adapted to the developmental level of the inductees.

Finally, it is important to specify that most of the characteristics of effective preparation programs for middle leaders were deduced from the reviewed Western literature. No studies were found to explore the professional need and the preparation of middle leaders performing instructional supervisory functions in a school offering multiple programs in the Lebanese context, which is the purpose of this study. Details of the methodology adopted for this single case-study are discussed in the chapter that follows.

CHAPTER 3

METHODOLOGY

This study aims to explore the challenges facing middle leaders when they first assume their instructional supervisory functions, as well as their professional development needs. The study also intends to identify design characteristics (content, approach, and practices) of an induction program that aims to prepare middle leaders for their instructional supervisory functions in a private Lebanese school with multiple international affiliations. The research design adopted for this study favored the attainment of the research purpose; this design will be presented in the following sections of this chapter.

Research Design

This study was conducted using a qualitative single case-study research design. Merriam and Tisdell (2016) explain that researchers often opt for a qualitative design when the area in the knowledge base to be explored is undertheorized. They add that when qualitative researchers "do not find knowledge; they construct it" (p. 9). In fact, the shortage of research on instructional supervision in the Lebanese context, favors a qualitative design since the latter often provides thick data that ensures an in-depth understanding of the research problem within the specific context (Creswell, 2013). Moreover, qualitative research has three main characteristics that served the purpose of this study. First, data was collected in the natural setting, that is the participants were observed and interviewed in the school under study. Second, the researcher played a key role in the study. The researcher works in the selected school, therefore, she had

access to multiple sources of data; however, she only used the school documents shared by the school administration, and those posted on the school website. The researcher was also recording observations in her journal which will be described in the section on data collection tools. Third, by adopting a qualitative design, the problem was first described from the perspective of participants and then analyzed from the point of view of the researcher (Creswell, 2013). These characteristics are confirmed by Merriam and Tisdell (2016) as they state that for qualitative research "the focus is on process, understanding, and meaning; the researcher is the primary instrument of data collection and analysis; the process is inductive; and the product is richly descriptive" (p. 15).

This study also adopted a single case-study design because this research design provides a deep understanding of the phenomenon in the context of the selected school (Gall et al., 2010). In fact, Gall et al. (2010) describe a case study as an investigation that "involves in-depth study of instances of a phenomenon in its natural context while conveying both the researchers' and participants' perspectives" (p. 269). The researcher started by exploring the challenges faced by the middle leaders selected for this study, as well as their professional development needs from the perspective of the participants themselves. The participants' responses were then analyzed conceptually from the researcher's perspective in an attempt to extend the current knowledge on effective in-service preparation programs.

This study was also guided by the action research methodology, as described by Mertler (2017), to analyze data in order to develop a design proposal for an induction program intended to prepare middle leaders for their new role in the selected school. In addition to improving practice, action research is a means to "reframe the problem" based on the selected context. (Gall et al., 2010). In fact, Mertler (2017) asserts that

action research "focuses specifically on the unique characteristics of the population … with whom some action must be taken" (p. 4). The middle leaders participating in the study can best describe their functions and the challenges they encountered as they transitioned into their new role, as well as their professional development needs in the context of the school under study. Data was collected using individual and group interviews and relevant school documents and concentrated on the challenges facing the middle leaders, their perceived professional needs, and the design characteristics of the induction program that can prepare them for their instructional supervisory functions.

Finally, this study followed the constant comparison method to analyze data. Gall et al. (2010) describe the constant comparison method as a "process of comparing instances of each code across segments in order to discover commonalities in the data that reflect the underlying meaning of, and relationship among, the coding categories" (p.282).

Different facets to the case focus were addressed in the four research questions:

1. How do middle leaders (subject experts) perceive their role and functions as instructional supervisors in the school under study?
2. From their own perspective, what are the major challenges facing the middle leaders as they transition into the new supervisory role in the school under study?
3. What forms of organizational support (in terms of structure, policies, procedures, and actions) does the school provide to facilitate the transition of middle leaders into their new supervisory role?
4. What are the design characteristics of an effective induction program (content, approach, and practices) that aims to prepare middle leaders for their instructional supervisory functions in the school under study?

Study Site and Participants

Qualitative researchers often collect data "at the site where participants experience the problem under study" (Creswell, 2013, p.234). In order to contextualize the data that was collected during this single case-study, it is necessary to provide a rich description of the study site and participants.

Study Site

This study was conducted in a large private K-12 school in Lebanon with around 3600 students and 350 teachers. The school under study has two campuses: the main campus, located in Beirut, serves K to 12 students, and the mountain campus, in the Matn district, only serves K to 9 students. Students from the mountain campus join the main campus once they complete grade 9. On the main campus, classes are grouped by cycle in four separate buildings, referred to as: pre-, elementary, middle, and secondary schools. On the mountain campus, classes are grouped in two buildings: the lower school (K-grade 3) and the upper school (grades 4-9). Each cycle-school has its own leadership team: a director, one or more assistant directors, heads of programs (at the secondary school), facilitators (at the secondary school), department chairs (at the middle school), and PYP coordinators (at the pre- and elementary schools). The six directors report to the school president and to the vice-president for academic affairs, who in turn report to the board of trustees.

This school has been serving Lebanese and international students for more than one hundred and twenty-five years, and it is one of the most reputed schools in Lebanon. The school was purposefully selected because the researcher has been working at this school for the past thirty years and thus, she used her knowledge of the context to enrich the study. Moreover, the middle leaders participating in this study are

expected to perform instructional supervisory functions in a school offering four programs, which creates a context different from what we commonly find in the literature. The selection of cases in this study followed purposeful sampling where the researcher "selects individuals and sites for study because they can purposefully inform an understanding of the research problem" (Creswell, 2007, p. 156). In fact, the selected school has three foreign affiliations and thus offers different programs at the different cycles: (1) International Baccalaureate-Primary Years Program (IB-PYP) at the pre- and elementary schools, (2) Lebanese, French, and American college-preparatory program (CPP) at the middle and secondary schools, in addition to (3) the International Baccalaureate-Diploma Program (IB-DP) for grades 11 and 12. The language of instruction is English or French depending on the program.

The size of the school and the multiple programs it offers generated a complex organizational structure comprising administrative leaders as well as a large number of instructional supervisors in different leadership positions such as a vice president for academic affairs, heads of programs, IB coordinators, department chairs, and facilitators, and subject experts who are the selected participants for this study.

The school also has its own Center for Educational Resources (ERC) that supervises curriculum documentation, accreditation process, and professional development for all faculty and staff. The researcher is currently the assistant to the director of this center, and she collaborates with the selected participants who mainly report to the vice-president for academic affairs.

Participants

This study focused on a group of middle leaders performing instructional supervisory functions in this school. The purposefully selected participants are ten former and current subject experts (Table 1) who were appointed to supervise the development and implementation of curricula for the four programs offered at this school and across its different cycles, and to support teachers properly implement the multiple curricula. Each current subject expert supervises four curricula for one of the main subjects taught at this school, namely: Arabic and English languages, Math, Sciences, and Social Studies. However, two of the current subject experts share the responsibility of supervising the different French-language curricula: one subject expert supervises French as an additional language (FAL), taught in the English section while the second supervises French taught in the French section (Table 1).

Seven out of the ten subject experts accepted to participate in this study. The seven participants present a variety of backgrounds pertaining to the subjects they supervise, the positions they hold in the school, and the number of years they have spent in this function (Table1). In fact, the subject experts started their career as teachers in the selected school before they were appointed to their new role. Two of the current subject experts still have a reduced teaching load in addition to their supervisory functions. Similarly, the three former subject experts had partial teaching loads in addition to their supervisory responsibilities.

The aim of this study was best attained by exploring the participants' own perceptions of the challenges they faced, and their professional development needs as they transitioned into their new role. The participants in this study were selected because they are "likely to yield relevant, and information-rich data" (Gall et al, 2010,

p. 279). Gall et al. (2010) also state that researchers who adopt a case-study approach often interact with the participants in their work environment to investigate their understanding of specific issues related to the research problem.

The privacy of the participants was protected since the researcher used codes instead of names when collecting and analyzing data.

Table 1

Position, Appointment Dates, and Curricula Supervised by Subject Experts

Participants' Codes		**Current Position** (in addition to being a subject expert)	**Supervised Curriculum**	**Appointment Date**
Former Subject Experts	**FSE1**	Teacher and department chair	Science curricula taught in French (National and International), K-9	2017/18 (served for 3 years)
	FSE2	Teacher	Science curricula taught in English (National and International), K- 9	2017/18 (served for 3 years)
	FSE3*	Teacher	Arabic-language curricula (National and International), K-12	2018/2019 (served for 1 year)
Current Subject Experts	**CSE1**	Teacher and facilitator	Arabic-language curricula (National and International), K-12	2019/20 (Replacing Subject expert FSE3)
	CSE2	x	Math curricula (National and International), K-12	2017/18
	CSE3	Teacher and facilitator	Science curricula (National and International), K- 9	2020/21 (Replacing subject experts FSE1 and FSE2)
	CSE4	Assistant director	French-language curricula (National and International), K-12	2018/19

CSE5	x	FLE curricula (French as an additional language), K-12	2018/19
CSE6*	VP for academics	Social studies curricula (National and International), K-12	2017/18
CSE7*	Assistant Director	English-language curricula (National and International), K-12	2019/20

Data Collection Tools

This single case-study is supposed to generate a thick description of what the participants consider as challenges to their functions and how they perceive their professional development needs. To gather such data, the following tools were used: writing journal notes, conducting individual and group interviews, and collecting relevant school documents such as the subject experts' job description, the schedule for some professional development days, and the school's professional development policy (Table 2).

Journal Notes

The researcher is a full timer at the school under study and one of her tasks is to supervise the documentation of curricula on the electronic platform used by the school. Moreover, the researcher sometimes collaborates with the subject experts during their work sessions at the ERC. Hence, she resorted to her written notes and observations of the subject experts' behaviors that informed the research questions in the actual school setting. For the duration of the study, the researcher was also keeping a journal comprising three main sections: (a) the researcher's personal statement determined by doing a self-interview and answering the four individual-interview questions, (b) the

data collection process describing the way individual and group interviews were conducted, as well as the school documents used as sources of data, (c) personal reflections including the rationale of any change in the data collection process.

The researcher took note of some events organized by the school involving the subject experts, such as the induction week to launch the year, and the in-service days during the academic year. She also attended a Zoom-meeting during which the subject experts were preparing for one of the in-service days, and she recorded her observations related to some of their tasks. Corbin and Strauss (2008) explain that researchers often combine field notes with interviews to avoid possible misinterpretation of data. In fact, field notes are a means for observing participants in their work context for a certain period of time (Gall et al., 2010), and documenting contextual features of an observation that is relevant to the research problem (Creswell, 2010; Morgan, 1997). These notes were used to support the data gathered from the interviews, and after analyzing school documents. Hence, these notes helped in triangulating data, and added to the credibility of the study.

Individual Interviews

Research guided by a qualitative case-study design generally uses interviews as a main data collection tool. The data for this study was primarily collected through semi-structured interviews. For interviews to generate comprehensive data, questions must be "open-ended, general, and focused on understanding the central phenomenon in the study" (Creswell, 2010, p. 163). Moreover, the interviews focused on soliciting the participants' experiences around their own learning. Webster-Wright (2009) states that in research on successful professional development, it is not enough to ask the

participants to identify useful professional development activities; they must be also encouraged to describe their personal experience of learning.

The researcher conducted an interview with each of the seven subject experts who accepted to participate in this study (Appendix A: Individual interview protocol). The interview questions were sent to the participants before the interview. The individual interview with each subject expert lasted between 40 and 60 minutes. They were all conducted via Zoom except for the interview with FSE2 who insisted to have the interview on campus in an open area to abide by COVID safety measures. The researcher recorded this interview on her mobile phone. During these interviews, except for the interviews with the French subject experts, the researcher was asking the questions in English and the participants were free to answer in Arabic or in English. During the interview with the French subject experts, the researcher used the French version of the interview protocol and the two participants answered in French. All interviews were audio-recorded, transcribed verbatim, and translated into English where needed.

These interviews aimed at giving insight into (1) the role and functions of the subject experts' as they perceive it in the school under study, (2) the challenges faced by the subject experts when they assumed their instructional supervisory functions, (3) the policies, procedures, and actions provided by the school to support them as they transition into their new role, and (4) the design characteristics of an effective induction program that can be adopted by the school to prepare novice subject experts for their instructional supervisory functions.

The participants were generous in describing their functions, the challenges they faced, and the forms of organizational support. Still the researcher used some probes to

encourage them to describe the tasks related to curriculum development, and the challenges related to overseeing curriculum implementation on two campuses. On the other hand, the participants had difficulties to answer the fourth interview question, and the researcher used the probes to help them share the design characteristics for the proposed induction program.

Focus Group Interview

In order to do member checking, triangulate data, and further explore emerging issues related to the research problem, a focus group interview was planned to be conducted with the current subject experts. Former subject experts were not invited to the focus group interview to avoid possible discomfort to the current subject expert replacing them. Gall et al. (2010) describe a focus group interview as a type of interview that is usually facilitated by the researcher and during which a group of participants are involved in a discussion that is guided by open ended questions. Gall et al. (2010) add that in this type of interview "because the respondents can talk to and hear each other, they are likely to express feelings or opinions that might not emerge if they were interviewed individually" (p. 280). In this study, the focus group interview aimed to explore the professional development needs of the subject experts when they first assumed their functions, as well as their recommendations for the induction program that the school can adopt to prepare novice subject experts (Appendix B: Group interview protocol).

The initial plan was to have a focus group interview with the five current subject experts participating in the study. However, one the participants, who can only express herself in French, was hesitant to join this interview knowing that the other participants will be expressing themselves in English and in Arabic. Thus, the researcher decided to

have two group interviews: a group interview with CSE4 and CSE5 conducted in French, and a focus group interview with CSE1, CSE2, and CSE3 conducted in English. These interviews were about 40 minutes long, conducted via Zoom, audio recorded, transcribed and translated to English where needed.

The participants received the questions in English and in French with the invitation, before setting the interview dates. The group interviews were conducted after coding and categorizing the data gathered from the individual interviews; hence, the researcher also got the participants' feedback on the generated themes. Focus groups often follow individual interviews when the researcher needs to explore, aspects of the research problem that might emerge after analyzing individual interviews with participants (Morgan, 1997), or aspects that need to be explored more in depth (Creswell, 2010).

During these group interviews, the participants repeated and clarified most of the ideas they had shared during the individual interviews. So, regarding the first two research questions, the researcher believes there was saturation of data. Yet, the participants provided new information with respect to the forms of organizational support and the proposed induction program. The participants opened many side discussions during the group interviews and the researcher had to bring the discussion to its focus by using the different probes.

School Documents

The researcher examined some school documents that were posted on the school website, and two other documents shared by the school administration. These documents included: an old version of the subject experts' job description and the recent version of this document, the school calendar, the schedule for one of the

induction weeks, the schedule for an in-service day, and the school's professional development policy. The researcher wanted to examine the school's organizational structure; however, this was not possible as it was under revision, and it needed the approval of the board of trustees.

These documents helped to contextualize the challenges facing this group of middle leaders in the school under study and to inform the researcher about specific professional development needs related to their functions. Examining school documents is also considered as a means of triangulating the data collected on the research problem with data gathered from interviews and journal notes. According to Gall et al. (2010), triangulation "involves use of multiple methods to collect data about the same phenomenon in order to confirm research findings or to resolve discrepant findings" (p. 279). The researcher started collecting the school documents while conducting the interviews; however, she did not code the relevant sections in these documents until she was done with analyzing the interview data. The school documents were treated in the same manner as the transcriptions of the interviews, in that the relevant sections were coded and then added to support the themes discussed in the chapter on data analysis.

Table 2

Sources of Data to Answer Each Research Question

Research question	**Sources of Data**
1. How do middle-level leaders (subject experts) perceive their role and function as instructional supervisors in the school under study?	- Individual interviews - School documents (e.g., job description of subject experts) - Journal notes (e.g., notes taken during the interviews, and while observing the subject experts during their work sessions at the ERC) - School website (School policies)

2.	From their own perspective, what are the major challenges facing the middle leaders as they transition into the new supervisory role in the school under study?	- Individual interviews - Group interviews - School documents (e.g., job description) - Journal notes (e.g., notes taken during the interviews, and while observing the subject experts during their work sessions at the ERC) - School website (e.g., school calendar)
3.	What forms of organizational support (in terms of structure, policies, procedures, and actions) does the school provide to facilitate the transition of middle leaders into their new supervisory role?	- Individual interviews - Group interviews - School documents (e.g., school calendar showing the professional development days) - Journal notes (e.g., notes taken during the interviews, and while observing the subject experts during their work sessions at the ERC) - School Professional Development Policy
4.	What are the design characteristics of an effective induction program (content, approach, and practices) that aims to prepare middle leaders for their instructional supervisory functions in the school under study?	- Literature review - Individual interviews - Group interviews - School documents (e.g., Induction week and Inservice day schedules) - School Professional Development Policy

Data Analysis Procedures

In this single case-study the researcher started data analysis while collecting data that is after conducting the individual interviews, and before conducting the group interviews. Merriam and Tisdell (2016) argue that data becomes more "illuminating" when it is analyzed by researchers as it is collected. In fact, starting data analysis after the "first interview or observation" provides a sense of direction and allows the researcher to revise data collection methods (Corbin & Strauss, 2008). After conducting

each interview, the researcher transcribed and coded this interview to generate the themes and sub-themes, which were revised as more interviews were conducted.

The first transcribed interview was coded using the "open coding" method. The researcher used a Microsoft word version of the transcribed interview to highlight relevant selections and she inserted a text box to write the corresponding codes. Some statements were also underlined to designate that they can be used as quotes during data analysis.

The researcher could not easily group the codes in the first coded interview; hence she used Microsoft excel to re-code this interview, and to code all other interviews. Excerpts copied from each transcribed interview were posted in a column on an excel sheet and codes were written in an adjacent column. Each excerpt had an identifier representing the code of the participant. Group interviews were coded in the same manner, but excerpts had two identifiers: the participant's code and the group interview code. Coding using excel helped the researcher group common codes to generate the themes and sub-themes.

To answer the four research questions posed in the first section of this chapter, data collected from the different interviews was analyzed based on the constant comparison method. This method involves constantly comparing segments of data collected from different sources such as the different individual interviews or each individual interview with one of the group interviews, to determine commonalities that will help in developing the constructs and themes disclosed by this study (Merriam & Tisdell, 2016). To develop these themes, the researcher started with open coding, which consists of taking notes to label excerpts from the interviews. Then, the researcher compared the open codes to identify common codes; a strategy known as analytical

coding (Corbin & Strauss, 2008). After that, the researcher grouped the common codes under themes and sub-themes. The frequency of each theme was recorded to show how many participants mentioned the theme during the interviews, and how many times the theme was repeated by the participants. The flexibility of this method for data analysis allowed the researcher to generate themes related to the research problem and to attend to emerging themes of interest to the study before conducting the group interviews. Themes deriving from the coded data represent the researcher's understanding of some facets of the research problem as described by the participants (Corbin & Strauss, 2008). As more data was collected after conducting the group interviews, the themes and sub-themes were modified until the version used to guide data analysis was reached (Appendix E: Grouped Codes).

To sum up, data analysis was done in five stages: (1) Reading the participants' responses to code the data collected from individual and group interviews, (2) Comparing the coded data using the constant comparison method to identify similarities and/or differences, (3) Generating common categories, (4) Classifying data under the common themes, and (5) Comparing the themes that emerged from the analyzed data to those described in the reviewed literature.

Quality Criteria

Researchers that follow single case-study methods are mainly concerned with the generalizability of the findings of their studies (Gall et al., 2010). To establish the validity of this study, the researcher adopted methods that can ensure quality criteria such as credibility and transferability of the results. She also discussed some of the limitations of this study.

Credibility

According to Merriam and Tisdell (2016) qualitative researchers usually adopt three main strategies to increase the credibility of their findings: triangulation by cross-checking data collected using multiple tools, member checks to validate the participants' responses, and coding checks to validate the constructs generated from the coding method. For this case-study, the researcher also defined her personal statement to further increase the credibility of the results.

In this study triangulation was attained by comparing data collected from the individual and group interviews, journal notes, and relevant school documents. In fact, Creswell (2007) maintains that if the generated themes are "established based on converging several sources of data or perspectives from the participants, then this process can be claimed as adding to the validity of the study" (p. 251).

The researcher also conducted member checks by sharing the generated themes with the participants during the group interviews and asking for their feedback. Member checking is a strategy used by researchers to reduce the chance of misinterpreting the participants' responses (Merriam & Tisdell, 2016). In fact, the researcher started each of the two group interviews by sharing the themes that were generated from the coded individual interviews. Sharing the generated themes had two objectives: First, to put the participants back in the context of the study, and second, to have their feedback on whether the researcher was able to identify the themes as they described them.

To further enhance credibility of the results, the researcher asked a fellow researcher to conduct coding checks. This strategy can "determine the reliability with which different researchers classify qualitative data by the same categories" (Gal et al., 2010, p. 269). The transcribed interview with FSE1 was sent to a fellow researcher

along with the research questions and the interview questions for coding checks. The researcher made sure to delete any identifier (names used during the interview, name of the school, subject he/she supervises, etc..) that might hint to the identity of the participant or the school under study. Such identifiers were replaced by school X, subject X, teacher X, etc. The fellow researcher coded the interview and sent it to the researcher. Comparing the two coded versions, showed a high level of agreement between the codes used by the two researchers.

The researcher also defined her personal statement regarding the research problem by answering the four interview questions in her journal before she started collecting data (Appendix C- Personal Statement). The researcher is a veteran teacher in the school under study and she has her own understanding of the problem being investigated, which may have shaped the way she interpreted data. Merriam and Tisdell (2016) assert that "investigators need to explain their biases, dispositions, and assumptions regarding the research to be taken" (p. 249).

Transferability

Transferability indicates whether the "findings of one study can be applied to other situations" (Merriam & Tisdell, 2016, p. 253). To enhance transferability of the findings, the researcher provided a thick description of the study site and participants. The researcher also took notes in her journal on how the data was collected and analyzed. For each interview, the researcher has described the context and the interview process, wrote tips for the next interview, described how she transcribed and coded the interview (Appendix D- Journal selection).

Merriam and Tisdell (2016) propose a second strategy for increasing transferability by ensuring "maximum variation" in the selected sample. In this study,

despite the small size of the purposefully selected sample, the different positions held by these participants (Table 1) as well as their years of experience in their role as instructional supervisors allow for transferring the results of this research into different settings.

Limitations of the Study

This study has the following limitations. First, the school did not give the researcher access to documents such as minutes of meetings, and the organizational structure. Hence, for data collection, the study mainly relied on interviews, and few documents that were posted on the school website or that were shared by the school administration. Second, data was collected during the COVID period, and the subject experts were mostly working remotely. Thus, the researcher could not ask to shadow a subject expert for a day to observe the way they perform some of their functions. Third, the researcher works at the selected school, and while this has enriched the data it might also have left her with blind spots because of excessive familiarity with the context. Fourth, the findings of the study, especially the proposed induction program may not serve another school because it was developed to meet the needs of an atypical school with respect to the number of programs it offers. Fifth, the proposed program was developed based on the perspective of the role occupants, and it can be refined by also taking the teachers' perspective into consideration.

CHAPTER 4

DATA ANALYSIS

The purpose of this study is to explore the challenges facing middle leaders when they first assume instructional supervisory functions, and to examine their professional needs. The challenges and professional needs of middle leaders were explored in order to identify the design characteristics (content, approach, and practices) of an effective induction program to support middle leaders as they transition into their new role in the context of the school under study.

This chapter offers answers to the four research questions that this study targets based on the following sources of data: the individual interviews with seven subject experts (two former and five current), two group interviews with the current subject experts, some school documents, and the researcher's journal.

The results drawn from the analysis of the various sources of data are presented under five main sections: The role of middle leaders as perceived by the interviewed subject experts, their functions in this school, the challenges they faced when they transitioned into their new role, the forms of organizational support that helped them perform their functions, and finally the content and approach they recommend for an induction program designed to prepare novice subject experts in this school.

Role of Middle Leaders

When asked to describe the role of the subject experts in the school under study, three of the seven participants explained why this new position was created, while the other four focused more on the major functions under this role. The analysis of the participants' responses, as well as their job description revealed the way the participants

define their role, and helped the researcher construct the profile of the middle leaders that can enact this role.

The table below shows the compiled role-related themes and sub-themes and the frequency of responses as derived from the coded interviews.

Table 3

Frequency of Interview Responses for the Role-related Themes and Subthemes

Themes	Subthemes	Frequency for mentioning each concept	Participants mentioning this concept
Defining the role	Pedagogical leaders	3	2
	Resource person for teachers	7	4
	Implementors of change initiatives	5	3
Profile of the selected subject experts	Good knowledge of the school system	5	4
	Instructional supervisory experience	8	5

Defining the Role

During the academic year 2017/2018, the selected school has added to its middle leadership team, a group of leaders with position title "subject experts." The data showed that the new position was created to address a school-wide need, that of ensuring smoother transition for students as they move from one cycle to another by overseeing the vertical articulation of the different curricula. As described in the formal job summary, this role entails ensuring vertical continuity of the curriculum content, coordination of subject areas within and across cycle-schools, and between the two campuses.

Although the seven participants articulated the definition of their role in this school, either by justifying the need for this new position or by identifying the main

functions under the role, yet they all agreed on three facets of the role of the subject experts as middle leaders in this school. The data showed the subject experts as pedagogical leaders, resource-person for teachers, and implementers of change.

Pedagogical Leaders

Subject experts are found to have the role of pedagogical leaders, because the different functions under their role mainly target the supervision of the multiple curricula taught at the school. These functions will be explained in detail in the next section of this chapter.

Two of the participants confirmed this facet of the role during the individual interviews. In fact, when defining the role, FSE1characterized it as a “middle-layer position” stating that “it's not an administrative leadership, it is a pedagogical leadership.” Similarly, CSE1 clarified that “the subject expert at school X [he named the school] is not an administrative leader but she/he is the one who ensures the proper implementation of the curricula” noting that it justifies the presence of the word expert in the position title indicating that she/he is an expert in her/his field.

Resource-Person for Teachers

In addition to being considered as pedagogical leaders in this school, the subject experts are also regarded as resource-persons for the teachers. As a resource-person, the subject expert prepares support material to help the teachers cover specific topics and introduces new teaching and learning strategies as well as alternative assessment methods. Each subject expert oversees the different curricula related to her/his subject and supports the teachers to properly implement these curricula. This aspect of the role was asserted by CSE1 who said:

> So, his [referring to a subject expert] main role is a facilitator who deals with curricula, he is not expected to assess teachers nor their performance, however he is expected to evaluate the proper implementation of the programs. If he feels that any program is not properly or fully implemented, he needs to interfere …. in a positive way that aims to help the teacher grow and not for criticizing purpose.

Moreover, during the individual interview CSE2 shared two practices to explain how the subject experts acted as a resource-person for teachers in the different cycle-schools. She explained that teachers at the elementary school are not specialized in all the subjects they teach, needing a lot of support to be able to cover the topics related to different subject areas and that are embedded under one theme. According to CSE2, "here comes the role of the expert to provide the support as needed and to value their [referring to the teachers] efforts as on-going learners." However, CSE2 pointed out that teachers' needs for support when it comes to the content varies by grade level. She stated that at the middle school, teachers rarely needed help in the content, instead "we worked together on assessment, for example, how to design a test, time allocated for a test, and avoiding redundancy in the targeted objectives."

Interestingly, all the participants agreed on clarifying that their role as subject experts in this school is not to evaluate teachers. As CSE3 said "I'm not there to criticize teachers, I'm not there to evaluate them." Instead, as part of their role, the subject experts are expected to help teachers overcome any obstacle that might hinder the proper implementation of the multiple curricula taught at the school. During the group interview, CSE1 explained that the class visits and the work sessions with the teachers aim to identify the teachers' needs and to provide the necessary support to

sustain their professional growth. He stated that in order to help the teachers see him as a resource-person and not as a "policeman," he made it clear that his "focus is the curriculum" and that he is ready to offer any support in that area upon their request. Hence, ensuring the proper implementation of the different curricula by addressing the specific needs of the teachers is an important aspect of the subject experts' role.

Implementers of Change Initiatives

The subject experts in this school were also described by the participants as implementers of change initiatives who play a key role in sustaining school improvement. In fact, the appointment of this group of middle leaders was part of an action plan developed by the school to improve teaching and learning. This plan came in response to one of the recommendations given by the accrediting agencies during their last visit to the school. The team that visited the school and that represents two of the agencies by which the school is accredited, recommended that the leadership team work on improving vertical articulation of the curricula between the different cycles, and on making teaching and learning more student centered. The first goal of the school action-plan was to improve vertical articulation of the different curricula, and hence to ensure a smoother transition for the students as they move from one cycle to another. The role of the subject experts towards this goal was reported by CSE2 during the individual interview when she said:

> The idea came from the recommendations given by the accrediting agencies saying that one thing that lacks at the school is vertical articulation, knowing that at school X we do not necessarily follow the same program over the different cycles.

During the first year of their appointment, the subject experts' role was to focus mainly on the transition between the elementary and the middle cycles. They revised the content of the curricula taught at the elementary cycle and suggested adding specific topics to the different subject areas to ensure a smoother transition for the students into the middle cycle. CSE4 pointed at this role in promoting the change initiative that was introduced to introduce more content into the curriculum at the elementary school, while respecting the IB-Primary Years Program (PYP) framework. He explained that "it was probably one of the school's needs to solve the problem of shortage in content at the elementary school where the PYP program was applied."

The second goal in the school action-plan was to make teaching and learning more student centered. The role of the subject experts in implementing this change initiative was mentioned by CSE5 during the individual interview. She described her task to achieve this goal, which consisted of piloting new strategies and designing new activities "to raise the students' involvement" during FAL classes. Additionally, FSE2 stated that "if we were to improve transition and articulation, for the benefit of students, we need to kind of change the teaching approach and encourage them [students] to become active learners."

Profile of the Selected Subject Experts

The participants' attempt to define their role as subject experts in this school as well as their formal role descriptions have revealed certain characteristics associated with the position holder that are defining of this role. These characteristics describe the profile of the middle leader, selected for the role in school X encompassing the participants' perspectives. The subject expert profile needs to include familiarity with the school system and having prior instructional supervisory experience.

Good Knowledge of the School System

The first facet of the subject expert's profile is to have a good knowledge of the system including the school procedures and the academic programs. This finding was affirmed by four of the participants who have served for some years in this school. They explained that subject experts are typically selected from among the experienced teachers because they need to be familiar with the school policies, its organizational structure, the hierarchy in each cycle-school, the different programs offered at each cycle, and the role of the faculty members with whom they need to collaborate. They also noted that because of this familiarity, the subject experts who are not new to the institution needed less time to adapt to the procedures in each cycle-school, and consequently had a better chance to be accepted by the other stakeholders.

On the other hand, two of the participants who were new to the school- CSE5 who was assigned this role during the first year she joined the school, and CSE3 who returned to school X after working for twenty years or so in another school abroad- argued that the familiarity with the school system is critical and the lack of it made their task of assuming their role more demanding. During the individual interviews, these two participants said they needed to be more familiar with the school system before assuming the functions under their new role. In fact, CSE5 asserted that the appointed subject expert must be "someone from within the school." According to her, she was technically ready for this role; however, she needed more time to understand "how things happen at school X." CSE5 added, "if someone from outside the school was appointed as a subject expert, she/he needs to clearly understand the system … in order to be able to properly do her/his work."

Additionally, CSE3 argued, “when you take a new role in an institution that you have recently joined, you need enough time to know how things work.” CSE3 clarified that she had to rely on the experience of other subject experts who were familiar with “the right communication channels” to gain the trust of the other middle leaders and the teachers.

Instructional Supervisory Experience

In addition to having a good knowledge of the school system, the participants pointed at the centrality of having prior instructional supervisory experience and the importance of holding to their teaching role while in their new role. First, the importance of having prior instructional supervisory functions was confirmed by CSE4 during the group interview as he said:

> Definitely, when we start any new function, we are novices, but we have behind us all our professional experience as teachers or any other position we had before. Hence, we are not novices in the programs, we are not novices in knowing the colleagues if we were already in the school.

The kind of experience that participants were referring to is that of performing instructional supervisory functions similar to those expected from the subject experts’ role, such as overseeing the implementation of the curricula, and ensuring coordination among teachers of the same grade level and across the different grades in one of the different cycle-schools. It is to not that all the selected subject experts have previously performed such functions, in this school or in their previous schools. The table below shows the current and prior positions occupied by the subject experts, including those who did not participate in this study, under which they performed instructional supervisory functions.

Table 4

Current and Prior Positions Occupied by the Subject Experts

Subject experts	Current Position	Prior Position
FSE1	Department chair	Department chair, subject expert
FSE2	-	Department chair, subject expert
FSE3*	Facilitator	Facilitator, Assistant to the director
CSE1	Facilitator, Subject expert	Facilitator, EdTech Facilitator
CSE2	Subject expert	Facilitator
CSE3	Facilitator, Subject expert	All programs coordinator in her previous school
CSE4	Assistant director, subject expert	Department chair
CSE5	Subject expert	FAL Coordinator in her previous school
CSE6*	Vice president for academics, subject expert	School director, Facilitator
CSE7*	Assistant director, subject expert	SPEC Coordinator

* did not participate in the study

The data in this table show that eight out of the ten experts had indeed performed instructional supervisory functions in one of the different cycles in school X. This facet of the profile was also mentioned by CSE2 during the focus group interview as she said:

> I chaired the math department at the secondary school for 20 years, I taught both the French and Lebanese programs, and I was also curious to know about the CPP and IB programs. Such a profile encouraged the school to choose me for this position.

Besides, two of the current subject experts had a similar instructional-supervisory experience in other countries, and they transferred their experience to the new context. CSE5 was the FAL coordinator in a school in Morocco before moving to Lebanon, and CSE3 was the science coordinator in an international school in Abou Dhabi. Talking about her prior experience, CSE3 explained that her readiness to take on the coordination role within a multi-curriculum program came from her previous experience. She stated, "the school I was in in Abu Dhabi offers five programs, we had AP, A-level, IGCSE, the regular HS, and we had the IB… and I was the coordinator for all five programs."

Secondly, three participants agreed that part of the role of a subject expert is to continue performing some teaching responsibilities. According to FSE2, "the subject expert needs to be in contact with the students to remain involved in teaching and learning." In fact, all the participants have taught, or are still teaching their subject area in at least one of the programs, at one of the cycle-schools in addition to serving as subject experts. CSE1 shared that the subject experts' teaching experience is one of the sources of knowledge they need to support teachers. This experience does not only offer knowledge that is content based, but it also enhances the subject expert's familiarity with the approaches to enhance learning, and the teaching practices that best reflect the philosophy of each program. He stated that "the subject expert is not only an expert in the subject matter, but also in the spirit of each program including the subject related skills, competences, and activities". Similarly, CSE2 reported:

> A subject expert must have a blend of a very good knowledge of the content plus a knowledge of the approach. Usually teaching approach comes from

her/his own experience. For me, a subject expert is someone who was/is an excellent teacher.

Functions of Middle Leaders

The role of the subject experts in this school is manifested through different functions they are expected to perform as listed in their job description, and as the seven participants described them during the interviews.

The recent version of the subject experts' job description has five sections: The job title, to whom they report, a job summary including the release time, their main duties and responsibilities, and the educational requirements and competencies. It is stated in the job description that one of the duties of the subject experts is to "lead a planning process to ensure the development, implementation, and evaluation of all instructional programs."

After analyzing the job description of the subject experts, as well as the participants' responses to the questions addressing their functions, the researcher classified these functions into four main categories: (a) coordinating the development of multiple curricula, (b) supervising curriculum implementation at the different cycles, (c) evaluating these curricula, and (d) supporting teachers.

The table below shows the compiled function-related themes and sub-themes, and the frequency of responses as derived from the coded interviews.

Table 5

Frequency of Interview Responses for the Function-related Themes and Subthemes

Themes	Subthemes	Frequency for mentioning each concept	Participants mentioning this concept
Coordinating the development of multiple curricula	Development of curriculum material	19	7
Supervising the implementation of multiple curricula	Ensuring the implementation of the written curricula	12	7
	Vertical articulation of curricula	17	6
	Horizontal articulation between two campuses	5	4
Evaluating curricula	Evaluating multiple curricula	9	6
Supporting teachers	Needs Assessment	13	7
	Providing Training to Sustain Teachers' Growth	9	7

Coordinating the Development of Multiple Curricula

The tasks related to curriculum development that were performed by the subject experts varied with the needs in each program at each of the cycle-schools. In certain cycle-schools, more attention was given to the content of the programs, whereas in other cycles, the subject experts had to focus on the pedagogical approach. Moreover, the degree of their involvement in the tasks related to curriculum development ranged from overseeing such tasks to personally designing curriculum material. The subject experts also pointed to an important facet of this function, that of collaborating with other stakeholders and deemed it essential to perform it successfully.

When probed to talk about their functions related to curriculum development, the seven participants described tasks where they designed curriculum material such as a scope and sequence, some units or lessons, and some activities to be used by the teachers in their classes. They also talked about supervising the development of such material by other middle leaders and teachers. The next sections will describe these functions as performed in the different cycle-schools.

At the preschool and elementary cycles, where the IB-Primary Years Program (PYP) is applied, there was a need to enrich the content of the written curriculum. All the participants reported that the subject experts were directly involved in developing material to be added to the different units at each grade level, while following the PYP framework. This task was described by CSE2 as she said, “the challenge was not to change the approach, but to put more emphasis on the content.” Similarly, CSE4 reported that as a subject expert he was expected to “help the colleagues teach according to the PYP framework while having a more demanding content, a content that is aligned with the French program and that is properly distributed over the years.”

The participants explained that the PYP follows a transdisciplinary and inquiry-based approach to teaching and learning, where the different subjects are integrated under general themes. The PYP curriculum is developed and documented as units of inquiry-UOI, comprising the content, skills, and activities to be covered at each grade level. All the participants reported that as they started working on the different curricula at the preschool and elementary levels, they had to incorporate more content into the UOI, including certain topics from the Lebanese and French programs, as well as some of the standards set by the Massachusetts department of elementary and secondary education. Given the nature of the PYP program, the coordination function of the role of

the subject expert was centered on making sure that the prerequisites for the three programs offered at the middle school were covered before the students move from the primary years cycle. This task was explained by CSE2, who stated:

> The first thing we did was to write a curriculum for the elementary. A curriculum that includes the Lebanese program, the PYP- because the PYP has a fully developed Math curriculum as a standalone subject, the BO- the French program, and some of the Massachusetts standards. We also referred to the Ontario Canadian program, not for its content, but because at Ontario they have both French and English sections in their schools, which is the case in our school.

However, the subject experts' input to enrich the content at the preschool and the elementary cycles changed with the needs in each subject area. These needs were identified by looking for the missing pre-requisites that ensure a smooth transition into the next cycle. For example, CSE2 reported that the students were facing some difficulties in geometry when they get to the middle school. So, it was necessary to develop a set of geometry standards for grades 1 to 6 based on the Lebanese and French programs. As for the sciences, the former and the current subject experts explained that they developed some resources for the homeroom teachers to help them cover the new science topics that were introduced at the different grade levels. According to FSE2 "for every science topic that any grade is going to cover we start by doing the research, we present teachers with the documents, the guidelines, and with some extra resources." Similarly, CSE5 clarified that for the FAL program at the elementary level "ready-made units from FAL textbooks" do not always match the UOI-themes. As a result, the teachers could not use the standard Common European Framework of References for

Languages (CECRL) textbooks and had to make many modifications to the proposed activities to fit the students' age-level. Hence, as a subject expert she supported them by creating teaching and learning material and activities that fit the UOI.

At the middle and secondary cycles, the subject experts' coordination function focused more on following up on the content updates and developing a new pedagogic approach rather than on the coordination of the content across levels, or across different curricula. Four of the seven participants reported that during the first two years of their appointment they mostly worked with the teachers at these two cycles on developing a student-centered teaching and learning approach and designing formative assessment practices. CSE2 stated, "we did not write any curriculum at the middle school; however, we had to interfere regarding the teaching strategies and the assessment methods." In fact, starting Grade 6, the entry level for the middle school, the students can join one of three programs offered by the school at this cycle: the Lebanese, the French or the College Preparatory Program-CPP. Then for grades 11 and 12 a fourth option is offered, which is the IB-DP program. The content of these programs is set by external agencies, such as MEHE, the French Ministry of Education, and the International Baccalaureate Organization (IBO). For instance, when talking about coordination of the curricula in the French program CSE4 asserted,

> The French program is fully developed and documented in detail in the BO. So, we do not have to write anything related to the content, we simply adapt the distribution and the activities to fit the textbooks we use and based on the needs and proficiency level of our students.

As a result, the subject expert's role is mostly restricted to follow up on any change in these programs and their coordination function centers on updating the other

middle leaders and the teachers. Three of the interviewed subject experts reported that they always follow up on program updates posted on the IBO website, published in the BO, and communicated by MEHE. This was pointed out by CSE1 who said "these programs are not static, even the Lebanese program. The subject expert needs to be aware of any update on their content and to share it with the different stakeholders."

While the content of the IB and the French curricula are regularly updated by the external agencies that develop these programs, a team of middle leaders and teachers internally revises the CPP program, only when a need arises. CSE3 reported that the CPP program at this school is "lately under work." The subject experts' coordination role consisted of attending the meetings and providing their feedback while trying to maintain relevance and coherence of these programs. In fact, the school has appointed a "CPP curriculum writing team", comprising teachers of the different subjects and from the middle and secondary cycles, to develop a new CPP curriculum for grades 6 to 12, based on the Massachusetts standards. According to CSE2, the CPP team has developed the curricula for the different subjects in grades 6, 7, and 8. The subject experts attend some of the meetings with the CPP team and give their feedback regarding the distribution of the adopted standards across the years and whether the suggested content and the targeted skills cover the requirement conveyed by these standards in each subject area. CSE3 added "I gave them ideas about the daily life application and the science experiments that could be integrated at the different levels."

In addition to the diversity of tasks and procedures followed by the subject experts while coordinating curriculum development, the collaboration with other stakeholder was essential to successfully perform this function. All the participants agreed that developing curriculum material requires regular coordination with the

teachers and the other middle leaders in the different cycle schools. In fact, CSE5 summarized their coordination function as a “collaborative work with the teachers who either prepare material and I do the revision, or they pitch in while I’m designing such material.”

Supervising the Implementation of Multiple Curricula

When asked to talk about the main functions they are expected to perform as subject experts in this school, all the seven participants agreed that supervising the implementation of multiple curricula takes most of their time. CSE1 confirmed the priority given to this function by saying “the main focus is supervising the proper implementation of the four programs.”

To perform this function, the subject experts are expected to ensure that the written curricula are properly implemented and to oversee the vertical articulation of the curricula across the cycles as well as between the two campuses. This function is also stated in the job description where it is mentioned that the subject experts “oversee the vertical and horizontal alignment of the curriculum in the four programs” and “monitor curriculum implementation through meetings with chairperson/facilitators and accessing courses of teachers on virtual learning platforms.”

Ensuring the Implementation of the Written Curricula

The subject experts explained that part their function to supervise the implementation of the adopted curricula is to ensure its implementation. This included comparing the school written and the adopted curricula - published by CERD, IBO, etc. - to ensure the proper implementation of the content, approach, and skills required by each of the four programs taught at the school. Moreover, the participants made it clear that this function was not only limited to overseeing the implementation of the content

of each curriculum, but also to ensuring that teaching and learning strategies are aligned with the pedagogical approach for each program.

The participants explained that to make sure the curricula for the different programs are properly implemented they had to map the available data on all the adopted curricula. They explained that when they first assumed their functions, all the curricula for the different programs taught at this school were hosted on one digital platform. In 2019-2020 the school adopted two other learning management systems (LMS) to meet the needs of each of the French program and the IB program. Thus, the subject experts had two main sources of data. First, the school written curricula hosted on the LMS, which were not regularly updated for the different cycles. Second, the adopted curricula of the different programs as officially published in the French official bulletin-BO, on the IBO website, and on the CERD website. CSE2 explained the importance of mapping the available data on the adopted curricula. She said:

> As subject experts, we know that for certain programs such as the Lebanese and the French programs, the curricula were set by an external source [referring to MEHE and the French Ministry of Education for the Youth and the Sports]. However, we ignored how these curricula were implemented at the different cycles in our school.

The participants noted that part of supervising the implementation of the curriculum included overseeing the alignment of teaching and learning strategies taking into consideration the different pedagogical approach for each program. In fact, CSE3 explained that "the Lebanese program has a different approach [referring to the pedagogical approach] than the CPP … So, the idea is not the content, the idea is the

approach. The approach is different, the kind of assessment is different." Similarly, FSE1 said:

> We need to implement not only the content, but the spirit of the program there is a spirit to it, there is a methodology, there are skills, there are [pedagogical] approaches to ensure that the program prerequisites are there.

Additionally, while overseeing the implementation of the written curricula, the subject experts worked closely with other middle leaders such as the PYP coordinators at the preschool and the elementary cycles, the department chairs at the middle cycle, and the facilitators at the secondary cycle, to make sure that the requirements per program are well accounted for at each cycle. They reported that the strategies they used to perform this function varied with each program and from one cycle to another. Certain tasks required the cooperation of the department chairs, while other tasks necessitated classroom observations, and working directly with the teachers. For instance, CSE4 explained during the individual interview that he collaborated with the French facilitator at the secondary school "to work on the selections for the French literature classes and to choose reading books that cover the objectives as set in the BO." The subject experts also visited classes at the middle and secondary cycles, not to evaluate teachers as asserted by FSE1, but to ensure the implementation of the written curriculum and to identify areas that need revision, a task that will be explained later in this chapter.

At the elementary and preschool cycles, the subject experts' role in ensuring the implementation of the written curriculum included working directly with the teachers. They reported that upon their requests they checked their unit plans and helped them develop activities that target certain skills and objectives required by the programs they

teach. CSE5 explained how she directly collaborated with the teachers to perform this task.

> My role as a FAL subject expert is to supervise the proper implementation of French as an additional language in the English section according to the Common European Framework of Reference for Languages (CECRL) that we follow at school X. I can give you an example, at the preschool level, I check the weekly plan done by the teachers to make sure it follows the CECRL-framework. I also verify the relevance of the documents they use and that these documents are age appropriate.

Vertical Articulation of Curricula

Analysis of the data revealed that supervising the implementation of multiple curricula also included overseeing the vertical articulation of the curriculum in each of the different programs to ensure a smooth transition across levels. In fact, the participants explained that the multiple programs offered at school X make this transition more challenging for the students as they switch from the PYP program to one of the three programs offered at the middle school. Actually, about 70% of the students join the Lebanese program when they get to the middle cycle, and 30% choose either the CPP or the French program since they can be exempted from the Lebanese Brevet. Furthermore, the data revealed that the structure of this school adds an extra layer of complexity at the transition levels because the students joining a new cycle-school have to move to a new building, meet a new leadership team, and become familiar with the cycle-specific procedures. This complex transition puts additional demands on the role of the subject experts in ensuring a smooth implementation of the written curricula.

During the individual interview, CSE4 defined vertical articulation as “transition and progression in the programs.” Ensuring vertical articulation of the curricula requires looking into the content per level, usually documented as a yearly plan for each subject, or into the content per cycle in the form of a scope and sequence, to make sure there is an appropriate progression of the themes while avoiding redundancy. In addition to looking into the content, the subject experts also make sure there is coherence in the way this content is delivered, namely in the approaches to teaching and learning, and in the way students’ learning is assessed.

Starting with the content, the subject experts are expected to oversee the progression of the learning objectives across all the cycles. According to FSE2, subject experts had to focus on the content objectives in each program and to “communicate with their colleagues to suggest the change needed in order to have a well-articulated curriculum from preschool to secondary.” FSE2 also noted that a well-articulated curriculum shows spirality in the content while avoiding redundancy. The curricula in each program are described as well articulated if they show continuity in the content objectives across the different grade levels. Additionally, the participants agreed that the curricula also need to have spirality in the topics covered which allows the students to further develop their knowledge of a topic as they move from one grade level to another.

However, vertical articulation of the curricula and smooth transition across cycles is not limited to the continuity in the content objectives; it also entails aligning the approaches to teaching and learning used at the different cycles. As mentioned earlier, the transition into a new cycle-school was relatively difficult for the students when they get to grade 6, the entry level for the middle cycle. In fact, CSE3 clarified

that the transition from the elementary school into the middle school "has been a challenge because they have different approaches [referring to pedagogic approaches]; in the primary years the PYP approach dominates, while at the middle school there are three different programs with somehow different approaches."

Three participants pointed out the importance of having an overall vision of the curriculum content across the whole school to ensure a proper transition and safeguard continuity. FSE1 explained that before the appointment of the subject experts, the science teachers at the middle school "were dropping some, topics which are needed later in 2nde (grade 10) like Geology, so we had to introduce Geology again within the path of middle school." CSE2 also reported that she worked on a full set of Geometry standards for grades 1 to 6. Her goal was not only to enrich the Math content at the elementary cycle, but also to ensure the proper transition into the middle school since grade 6 is the entry level at the middle cycle. Similarly, CSE5 talked about her task to make sure there is continuity in the French as an Additional Language (FAL) content. She clarified that

> When students get to the middle school at grade 6, they did not have the expected level according to CECRL. There was a need to set a scope and sequence and then to write a full program starting from KG1.

In fact, before the appointment of the subject experts, curriculum revision was done by the teachers and the department chairs, or the PYP coordinators, but it was separately done at the cycle-school level. Also, teachers of the transition classes used to meet twice per year to maintain the continuity in both content and methodology. However, these initiatives were not sufficient to have a fully articulated curricula, as some topics were repeated at different grade-level, while other topics were omitted

without taking into consideration that they are pre-requisites for concepts that students need to cover at higher grade-levels.

During the individual interviews, four out of the seven participants considered ensuring vertical articulation of the curriculum as major function under the role of the subject experts in this school. For instance, FSE1 reported that the role of the subject expert is mainly "to observe the vertical alignment of the curriculum." FSE2 also argued that "improving transition for the benefit of the students" was the reason behind the appointment of this group of middle leaders. In addition, one of the main duties listed in the job description specifies that the subject experts "ensure that curriculum transitions … include essential knowledge and skills to move from one grade level to another." To ensure vertical articulation, the interviewed subject experts explained that they had to coordinate with other middle leaders to make sure there is coherence and progression in the topics covered from one year to the next and especially at the transition levels between the cycle-schools where some students may shift from one program to another. The transition between the elementary and middle cycles was identified by the participants as relatively challenging for the students and as requiring more coordination from the subject experts. FSE1 argued "the transition is difficult because the child at elementary has a homeroom teacher and he ends up having seven to eight teachers each teaching one subject." Participants agree that unlike the situation at the middle school where each subject is given by a specialized teacher, most of the subject areas are covered by the homeroom teachers at the elementary school; and the students do not always consider them as separate subjects. Therefore, the students transitioning from the elementary school to the middle school get overwhelmed by the number of the subjects and, by the expectations of the teachers teaching these subjects.

The complexity of the school structure and the different procedures followed in each cycle-school will be later addressed as one of the challenges faced by the subject experts. Its impact on vertical articulation was described as follows by CSE1 during the individual interview,

> Each cycle is headed by a director and is physically located in a separate building so there is the need to connect these schools especially at the transition levels … Here comes the role of the subject expert to ensure smooth transition between the different cycles.

Data revealed that depending on the cycle, each subject expert had to collaborate with either the PYP coordinators, the department chairs, or the subject facilitators, to verify whether the curriculum for the subject she/he oversees is aligned and ensures a smooth transition for students from one cycle to another. Upon analysis of the interviews, the researcher identified three areas in which the subject experts collaborated with the other middle leaders to bridge the gap between the elementary and middle cycles.

First, the subject experts worked with grade 6 teachers and the department chairs at the middle school, to shift from a "guided approach" to teaching and learning as described by one of the subject experts (CSE2) into a more inquiry-based approach. In fact, CSE2 reported that it was important to start by "changing the teaching approach especially for the Lebanese program to instill a certain balance between the way students learn at elementary- by inquiry and how the approach becomes more guided at the middle level."

Second, the subject experts coached the transition-grades teachers in the two cycles to use strategies that can help students develop some work habits that facilitate

their transition into the middle-cycle. According to FSE1, teachers were encouraged to work with the students on "time management, study skills, chunking tasks, and setting a plan for their work especially for big projects."

The subject experts and the other middle leaders identified a third area that they worked on to ensure vertical articulation to facilitate students' transition and that was the assessment of students' learning. As part of their function to oversee vertical articulation of the curricula, the subject experts were also expected to revise the assessment strategies, and to help teachers develop new strategies that can better prepare students in one cycle-school for the expectations of the next cycle. FSE1 clarified that the teachers at the elementary cycle "started with shorter assessments [referring to the tools such as test and quizzes] and went towards longer assessments so to prepare the child to the expectations at the middle school." She added that the teachers at the middle school were encouraged to use formative assessment and performance-based assessment, in addition to regular tests, to evaluate students' performance. Similarly, FSE2 reported:

> If we were to improve transition and articulation, ...we need to kind of change... the types of evaluation. At the middle school we have made some changes, we are using formative, product based, and alternative assessment tools especially during the COVID-period. It's no more relying on tests, there are skills to be assessed.

Horizontal Articulation between Two Campuses

Unlike most of the middle leaders in this school whose functions are limited to one cycle on one campus, the subject experts are the middle leaders with supervisory functions that are expected to supervise four programs over different cycles, and on two

campuses. According to CSE4, “being a subject expert involves coordination, dialogue, ensuring harmonization and coherence all this along two axes: horizontal and vertical.” Therefore, in addition to overseeing the vertical articulation of the different curricula across the different cycles, the subject experts must also supervise horizontal articulation by ensuring that each curriculum is implemented in the same way at each level on the two campuses.

Ensuring the harmonization of the curricula and their implementation on the two campuses in school X, necessitates a close coordination between the subject experts and the PYP coordinators, the department chairs, and the teachers on both campuses. This is a major goal set by the school, and a function expected from the subject experts because of the distance between the two campuses and the fact that the different cycle-schools on each campus have their own teams: directors, middle leaders, teachers, and staff. All the interviewed subject experts asserted that this function of their role is necessary to ensure coherence as one school, which has one governing body, and is guided by the same mission-statements. Furthermore, at the end of grade 9, students on the mountain campus join the secondary cycle on Beirut campus. Thus, the subject experts need to make sure that the students on both campuses have the same prerequisites in terms of content and skills that facilitate their transition into the secondary cycle. It is also important to mention that during the individual interviews, all the seven participants agreed that liaising the two campuses was relatively a challenging task, and this aspect will be explained in the section addressing the obstacles they had to overcome when they first started their functions. This was pointed out by FSE1 who explained that ensuring harmonization between the two campuses “that are one hour apart… was a big concern.”

Evaluating Multiple Curricula

Revising and updating the curriculum is an ongoing task in all schools regardless of the programs they follow. This function is clearly stated in the job description of the subject experts where it is mentioned that they "lead the curriculum review process." Evaluating the different curricula taught at school X was mentioned by CSE1 who related that the programs "are not static", rather they need to be evaluated and refined continuously. The participants agreed that the role of the subject experts in school X is not limited to following up on the updates shared by the local and the international organizations that develop many of the adopted curricula at the school- such as CERD, IBO, the French Ministry of Education, etc- to accommodate the requirements of these external organizations, but also to revise these curricula based on the goals set internally by the school.

Furthermore, when describing their function of evaluating the different curricula, the seven participants agreed that it involves three main stages: revising the curricula as currently implemented, identifying areas that need updating, and coordinating with other middle leaders to update these curricula.

First, revising the curricula as currently implemented requires that the subject experts know about theses curricula as written and taught at each level in the different programs. Definitely, their prior experience as teachers and as instructional supervisors in certain cycle-schools makes them familiar with some of the curricula but not with all. All the participants reported that revising the PYP curriculum took most of their time because all the subject experts, except for FSE3 who did not participate in this study, were not familiar with the PYP when they first assumed their functions. Four of the participants reported that it took them around two months to understand the PYP

framework and to figure out how this inquiry approach was applied at the preschool and elementary cycles on the two campuses. FSE1 explained the first stage of this task,

> We had to understand the PYP approach before we could add any content into the UOI. Because they have a theme per unit and under this big umbrella, you could put some new content related to the main theme.

In addition, each subject expert still needed to revise the curricula relevant to her/his subject at the different grade-levels, to ensure that they meet the requirements of each program in terms of delivering the content to the students, developing the subject-related skills, and assessing students' performance. The subject experts also made sure "there is progression and continuity across the cycles" as FSE2 said. For example, CSE3 described her approach to revise the multiple science curricula,

> I started my work by observing classes. I attended many classes at different cycle-schools in order to check whether we are implementing what we are supposed to implement regarding the science programs.

The second stage of the evaluation process was identifying what must be updated and why. The participants reported that the subject experts used different methods to identify the areas that need to be updated in each curriculum. One of the subject experts referred to the results of the purposefully designed placement tests, administered at the transition levels to evaluate the curricula she oversees. CSE5 explained that "mock placement tests" were designed to assess students' proficiency in FAL at the transition levels and the results were used to evaluate the FAL program at each cycle. Using this approach, she found out that "students at the preschool and elementary levels are not having a proper initiation in French." CSE3 reported another method used by the subject experts to review and evaluate the scope and sequence

across cycles, and to identify possible gaps in the content or major inconsistency in the approach. She stated “the PYP coordinators wanted my opinion regarding the scope and sequence of the elementary school, and how it prepares students for the different science programs at the middle school.” The French subject expert (CSE4) shared a different approach to revise the taught curriculum at the middle cycle and to compare it to the official French curriculum as documented in the BO. CSE4 made use of the newly adopted Learning Management System (LMS) to track the targeted learning objectives, and skills in the curricula as implemented at the middle cycles on the two campuses. He reported:

> During the COVID lockdown-period I uploaded the French curriculum as we wrote it for grades 6 to 9 in the French section, on Pronote [the name of the new LMS]...in form of learning objectives and skills... This way we can come up with a system-generated yearly plan and we can also verify that all the skills listed in the BO will be targeted, which up till now we did not do. This will be a way to ensure continuity and to verify that all the content objectives and skills per level are addressed.

While CSE4 used a LMS to evaluate the taught curriculum, CSE2 relied on the teachers’ feedback to revise the PYP Math curriculum that was developed for the elementary cycle and that has been implemented for the past three years.

Finally, the subject experts had to meet with other middle leaders at each cycle-school to discuss the areas that need revision in the different curricula. This aligns with what is stated in the job description that subject experts “meet with subject area representatives to review and, if necessary, recommend revisions to curricular documents, school-wide curricular standards, specific learning outcomes, and

instructional practices for the purpose of enhancing progression and transition from grade level to grade level, preschool through secondary." In performing this task, the subject expert had the role of a resource person who supervised the updating of the curriculum, as needed at each cycle. Each subject expert collaborated with a group of middle leaders and teachers from both campuses, that were asked to re-write specific sections of the curriculum. For instance, CSE5 reported that she had regular meetings with the PYP coordinators and the FAL teachers to update the FAL curriculum at the elementary cycle. She clarified:

> We developed a plan over two years before the students attain A-1 level [first level in language proficiency according to the European framework-CECRL] when they get to the middle school. This will eventually require revising the middle school FAL-program, and then also wait for two years to do a similar update at the secondary level.

Similarly, FSE1 said "I met with the chairperson at the middle schools on both campuses, to revise the different science curricula." CSE1shared a similar process for revising the Arabic curriculum at the elementary cycle. He explained that teachers cannot be "surprised" with such a task; so, in one of his meetings with the PYP Arabic-teachers, he started by informing them of the need for such a revision. He added:

> Then you start preparing for this major action during an assembly, this way individual teachers will not feel they have this extra task, instead they will understand it is a teamwork, they will feel they have a safety net.

Supporting Teachers

All the seven participants expressed the importance of supporting teachers as a key function given its significance in facilitating the implementation of the multiple

curricula taught at this school. This function is clearly stated as centered around providing professional development for the teachers. In the job description of this group of middle leaders, it is mentioned that the subject experts "provide training to teachers in the subject area according to the school standards upon need." Supporting teachers is also perceived by the subject experts as a major function of their role in this school. In fact, when they were asked to describe their role, the participants agreed that a subject expert's key role in this school is that of a resource person who supports the teachers in implementing the curricula.

Upon analysis of the individual and group interviews, as well as some school documents, the researcher identified two major tasks that the participants highlighted as critical to be able to perform the supporting of teachers' function while fulfilling the subject experts' role: assessing the needs of the teachers knowing that these needs are not common for all the teachers' and providing training to meet these needs.

Needs Assessment

Based on the analysis of the data collected, needs assessment was mostly associated with collecting data through class observations. The identified needs informed the design of professional development sessions that aim to support teachers while implementing the different curricula. In fact, it is stated in the job description that the subject experts visit classes to "observe teaching and learning of the subject as per the school's professional growth program." However, the subject experts did not only depend on classroom visits to assess the teachers' need; they also got some recommendations from the other middle leaders and specific requests from the teachers themselves.

All the participants reported that they mainly rely on classroom visits to identify the challenges faced by the teachers while implementing the different curricula in their classes. For instance, when talking about her classroom visits at the middle schools on the two campuses, FSE1 said that observing classes did not only help the subject expert "to collect data on the taught curriculum" but also "to sustain the teachers' growth." Similarly, CSE4 clarified that by observing classes at the elementary school, he was able to identify specific areas where some teachers needed his help. He mentioned "selecting age-appropriate reading books, implementing certain components of the new French program, and improving the language fluency of some homeroom teachers."

During the COVID-period when classes were running remotely, or in hybrid mode, the subject experts attended virtual classes conducted via Zoom, to pursue their function of supporting teachers. They also monitored the material posted by the teachers on their Google classrooms, as well as the students' submissions. It is important to mention that during the interviews, the participants talked about a checklist and some guidelines on what to look for in the teachers' Google classroom, but this document was never shared with the researcher.

Hence, during remote learning, the subject experts were still able to supervise the implementation of the curricula and to identify the teachers' needs related to teaching and learning in a digital environment. This was confirmed by CSE4 who stated:

> At the middle and secondary schools, I mainly observed classes when we were face to face and this continues now but less frequently via Zoom and by means of Google classroom.

On the other hand, few subject experts did not solely rely on classroom visits during face to face and hybrid teaching, nor on attending Zoom-classes and checking the teachers' Google classrooms during remote learning to identify the teachers' needs for professional growth. CSE2 clarified that it is was also important to discuss the observed challenges with the teachers to better understand it from their perspective. According to CSE2 "they [referring to the difficulties] may not be clearly observed in visiting the teachers' Google classroom, but when discussing it with the teacher one gets the full image."

Needs assessment also encompassed identifying common needs that cut across cycles and collecting those needs from other middle leaders at the school. PYP coordinators and department chairs identified common needs to groups of teachers in a specific cycle and shared these needs with the subject experts. Two of the subject experts reported that other middle leaders helped them assess the teachers' needs while implementing the curricula, and that they collaborated to set a plan for supporting teachers. FSE1clarified that before designing the training sessions she offered at the elementary school to introduce the new science topics that were added to the Units of Inquiry (UOI), she got some suggestions from the PYP coordinators to address the needs of the teachers in areas such as developing students' manipulative skills and using scientific terminology.

Furthermore, some teachers directly communicated with the subject experts and requested their support whenever a need arises. Three of the interviewed subject experts mentioned the teachers' requests as another source they depended on, to assess the needs in the different cycle schools. For example, CSE2 reported that some teachers at the elementary school shared with her the difficulties they have in teaching specific

Math topics, and they asked for her support to overcome these difficulties. According to her "I always had short visits to support teachers in topics like symmetry, probability, geometry… I often supported teachers in how to avoid certain misconceptions."

Providing Training to Sustain Teachers' Growth

A second aspect of supporting teachers is providing training to sustain teachers' growth. All the participants asserted that based on the need assessment, the school regularly identifies professional development areas for the teachers to help them meet school-wide goals or to train them on new digital tools and platforms adopted by the school. The subject experts are assigned few sessions to train the teachers during the induction week at the beginning of the academic year, and during the Inservice days which are reserved for professional development during the year. In these scheduled sessions, each subject expert provides support for the teachers from both campuses on the needs relevant to her/his subject area, and on the new initiatives taken by the school. The leadership team of the school and the ERC usually plan these professional development sessions. For instance, the induction program for September 2019 shows two sessions run by the subject experts: one session was planned to train the PYP teachers on the new topics added to the UOI and the second session to oversee the yearly planning for the middle-cycle and to ensure coordination between the two campuses. Moreover, the Inservice-day schedule for February 2021 includes one session run by the subject experts, the department chairs, and the PYP coordinators to help the teachers revise the curriculum transition documents per grade level and to ensure that all the prerequisites needed for the next grade are covered despite the remote learning mode during the COVID period.

All the participants reported that the strategies for support they used to help the teachers properly implement the different curricula changed with the identified needs. When these needs were specific for individual teachers, the subject expert provided immediate feedback and help to the teachers. In fact, when reporting on the classroom visits during the individual interview, FSE1 explained:

> If you observe anything that is nor correct, you need to interfere in a positive way and privately, to help the teacher get over the problem and not just say she teaches well or she does not teach well. I think this is the main role of the expert is to be there and help.

The subject experts also described another strategy they used to support teachers, that consisted of running short and targeted training sessions to accompany the teachers as they implement parts of the curriculum. Three of the seven participants reported that they offered "mini-PD sessions" for the teachers at the elementary cycle to introduce the new content and skills, added to the UOI as part of updating the PYP curriculum. CSE3 clarified that this strategy was mainly used at the elementary school because "the homeroom teachers do not have a degree in all the subjects they teach." CSE2 said that she offered "workshops covering some topics in Geometry and the approach to teach these topics" to the teachers at the elementary cycle. Similarly, FSE1 explained:

> Mini-PD sessions were designed to introduce the new science content, and the subject related skills such as how to observe, how to write what we observe, how to develop certain manipulative skills, how to draw a conclusion, and also to suggest references and hands on activities.

Interestingly, providing support to teachers in the form of training sessions was restricted to the elementary levels. All the participants confirmed that the teachers at the middle and secondary levels did not need support in the content because they are specialized in their subject areas. The subject experts mainly collaborated with the teachers at these cycles to introduce curriculum updates communicated by the external organizations that set the programs or those needed to implement the internal school-initiatives. Furthermore, the subject experts supported the teachers at these cycles in adopting teaching and learning strategies that are more student centered, and in using formative assessment as one of the means to evaluate students' performance. In fact, FSE2 mentioned that at the middle-cycle the subject experts mainly encouraged the teachers to "use formative, performance based, and alternative assessment tools especially during COVID. It's no more relying on test, there are skills to be assessed." Similarly, CSE5 asserted that the FAL teachers at all grade levels did not need to be trained on the content, "it is more the approach and the strategies used to teach French as an Additional Language (FAL)."

Challenges Faced by Middle Leaders

The subject experts' perception of the challenges they faced was explored by asking the participants to describe factors that hindered them from performing their functions when they transitioned into their new role. Upon analysis of the individual and group interviews, the researcher identified four types of challenges that were classified in two categories: Role-related challenges, and context-related challenges. The following is a description of the different challenges under each category.

The table below shows the compiled challenges-related sub-themes and the frequency of responses as derived from the coded interviews.

Table 6

Frequency of Interview Responses for the Challenges-related Themes and Subthemes

Themes	Subthemes	Frequency for mentioning each concept	Participants mentioning this concept
Role Related Challenges	Lack of shared understanding of the role	26	7
	Insufficient preparation to perform the expected function	20	7
Context Related Challenges	Insufficient time	11	7
	Complex school structure	22	7

Role-Related Challenges

There was a widespread agreement among the participants that the lack of a shared understanding of the role of the subject experts, and the insufficient preparation of this group of middle leaders were the main role-related challenges that hindered their functions when they transitioned into their new role.

Four of the seven participants reported that the subject experts' position was created in 2017/18 and that it was a new middle leadership position in school X. According to CSE1 though the role for this group of middle leaders was clearly defined in the job description, the challenge is in "how the different stakeholders understand this role." He added that announcing this new role created resistance by the directors who felt that the subject experts can "interfere in their schools." Similarly, FSE1 said that introducing this new role confused other middle leaders who perceived the subject experts' functions as "overlapping with their functions."

Moreover, the two former subject experts participating in this study, agreed that despite the clear job description, they lacked directions and preparation on how to

perform the functions of the role. The two role-related challenges reported by the participants will be explored in the next sections.

Lack of a Shared Understanding of the Role

All the seven participants agreed that the lack of a shared understanding of the subject experts' role and its functions by the different stakeholders is a major obstacle they faced when they transitioned into their new role. This "new role" as CSE4 described it, was not properly introduced to the other stakeholders in terms of what is expected of the subject experts, with whom they need to collaborate, and how the decisions can be taken when suggesting changes in a cycle-school.

The poor introduction of the role was mentioned by CSE1 who said that he often had to explain his role as a subject expert, as well as the different functions of that role not only to the group of teachers he collaborates with, but also to other middle leaders, and the directors. Additionally, FSE2 alluded that the school administration created the role without soliciting input from those that will be directly affected by it; namely, the teachers and the other middle managers. She explained,

> If I were to restart over in introducing my role, I would have suggested a common meeting among all stakeholders; directors, coordinators, heads of departments, PYP coordinators, and the subject experts, and they talk about what will be the tasks of the subject expert... It is important that they know about these functions and also to have their approval.

In fact, the participants' responses demonstrate that this challenge was experienced at the level of the directors, the other middle leaders, and the teachers.

Lack of Understanding at the Directors' Level. Poor understanding of the new role by the directors had its impact on their buy-in for the scope of authority and

responsibility of the subject experts. Three of the participants reported that when subject experts were first appointed, they only had one common meeting with the directors where they introduced themselves and briefly talked about their functions. According to FSE2, this one-time introduction was not sufficient, and the subject experts needed more ice-breaking meetings with each director to share the scope of their tasks and to be welcomed in her/his cycle-school.

Because of the school structure, each director oversees a cycle-school and considers it as her/his "own personal field" (CSE2). Actually, the directors are the decision makers in their cycle-schools, and the subject experts need their buy-in before implementing any change related to the curricula taught at the different cycles. Participants agreed that "there is a trust layer to break" (FSE1) before the subject expert is accepted in each cycle-school. Talking about the importance of the directors' buy-in, CSE1 explained that "the director decides for his school, so the subject expert needs the director's approval before taking any action, otherwise he will face resistance." Moreover, FSE1 argued that because of the absence of these ice-breaking meetings, the role of the subject experts was poorly understood by the directors who resisted their role. In fact, some directors used their authority to restrict direct communication between the teachers and the subject experts, and to collect data on the curriculum taught in their schools. FSE1 described the obstacles she faced at one of the cycle-schools; she stated:

> Access [to the curricula] was restricted, at the very beginning. So, what we could gather came from class observations, or from teachers when they tell you, please, we need to teach this topic, can you help; then you know what the taught curriculum is.

Role Conflict at the Level of Other Middle Leaders. Four of the seven participants explained that the lack of a shared understanding of the role of subject experts among PYP coordinators, department chairs, and facilitators resulted in frequent role conflict. For these middle leaders, who also have instructional supervisory functions, the subject experts' role overlaps with their role, each in her/his cycle-school. In fact, the subject experts' functions were not clearly explained to the other middle leaders in the school, thus the collaboration between the subject experts and the middle leaders in the different cycle schools was not always smooth. This was pointed out by FSE1 when describing the coordination with the PYP coordinators at the preschool and elementary cycles. She said, "there seemed to be an interference" with the functions of the PYP coordinators. She explained that at the beginning, it was difficult to draw the line between where her role ends and where the PYP coordinators' role starts. FSE1 stated:

> I am not there to interfere with the PYP way of teaching, because it is a beautiful framework which is really very structured and has its goals. But you cannot teach PYP without the content, you need to fill it with substance and the substance and what you teach is the expert, how you teach it is the PYP coordinator. So, this light line of difference between those roles was not really very visible and some thought it might overlap with their own role, so this was a big challenge.

The perceived role-conflict was also pointed out by CSE5 who argued that unless the subject experts' role is clearly explained "the department chair at the middle school might think that we are stepping into his territory, whereas in fact we mainly deal with the content".

The participants' responses show that the lack of a clearly defined line of authority between the two roles was an obstacle that the subject experts had to face at the different cycle-schools and not particularly in one. To gain the trust of the other middle leaders, and to avoid possible role conflict, the subject experts collaborated with the other middle leaders to reach out to the teachers. CSE4 explained that the tasks requested from the teachers at the secondary school, such as developing new teaching activities and reviewing their assessment methods, often came through the facilitator.

Lack of Understanding at the Level of Teachers. The lack of understanding among teachers of the role of the subject experts seems to constitute an additional source of challenge for more than half of the participants. During the individual interview with CSE5, she stated that not all teachers clearly understood the scope of the role of the subject experts and were not convinced of its added value. According to her,

> Many leaders support the teacher: the directors and their assistants, the department chairs and facilitators, hence teachers wonder what the subject experts are supposed to do as an extra layer of support.

Perceiving the subject experts' role as a supplementary layer of supervision, resulted in the teachers' resistance to the role. Two participants reported that many teachers showed resistance to the subject experts' role because they considered them as another group of instructional supervisors to whom they need to report and who can ask them for more work.

Consequently, the subject experts had to be very tactful to avoid the teachers' resistance to this new role as CSE1 reported. As a result of the emerging resistance, the participants noted that the challenge became one of gaining the teachers' trust. CSE3 explained that the subject experts had to gain the trust of the teachers they work with in

the different cycle-schools. She clarified that "the teachers need to know that you are not there to criticize them, you are there to assist and help."

Further challenges at the teachers' level were triggered because of the unclear line of authority between the different leadership positions that some subject experts have (Table 3). As a result, the participants reported that the teachers were not always able to separate between the two roles when they work under their supervision. For instance, CSE4 reported that because of his position as assistant director at the middle school, teachers at that cycle could not always separate between his two roles. Whereas teachers at the elementary school accepted his role as subject expert and saw him as a support person and not as someone with "hierarchical authority."

Other participants argued that more obstacles emerged due to the poor understanding of the subject experts' role. Mainly all the subject experts were teachers or continue to teach in one of the cycle-schools; therefore, their colleagues still see them as peers and do not always accept them as experts giving them support, thus failing to see the added value of this new role. This facet of the challenge at the level of the teachers was reported by CSE5 during the group interview when she stated:

> I faced more challenges at the middle school, because if you were a colleague and a teacher, it is not easy to re-position yourself, something I did not face at the elementary nor at the preschool.

Insufficient Preparation to Perform the Expected Functions

In addition to the lack of shared understanding for their role, all the seven participants agreed that insufficient preparation to perform their functions as subject experts was another role-related challenge they faced. Despite their experience as teachers and as instructional supervisors, the appointed subject experts did not receive

any pre-service training on their new functions. In fact, none of them had a prior experience with all the programs offered at the different cycle schools. For instance, CSE2 stated that the subject experts "were thrown into the role." This was also pointed out by FSE1 who explained that because of this insufficient preparation, subject experts took things into their own hands and worked independently to figure things out. Similarly, CSE5 stated that she did not have a special preparation for this role; hence, she had to self-learn some of her tasks.

Based on the participants' responses during the individual and group interviews, three areas were identified as insufficiently mastered by the subject experts to be prepared to perform their supervisory functions: lack of knowledge about certain programs, insufficient training to lead and manage change, and lack of familiarity with relevant policies and procedures for those who are new to the school system.

Lack of Knowledge about Certain Programs. All the participants reported that when they were appointed for this role, they were not familiar with all the programs they are asked to supervise. The subject experts were expected to oversee the curriculum in some programs that were new to them, and hence they perceived this lack of knowledge about certain programs as a major challenge. (CSE3) said that she was not familiar with the French program, and the two French subject experts reported that they were not familiar with the IB-DP. Similarly, CSE2 stated that the first challenge was to know about the PYP which she described as "an environment that we are not familiar with." During the interviews, the participants mainly focused on the challenges faced with the PYP at the preschool and the elementary cycles during the first two years after their appointment. In fact, revising the PYP curriculum and improving the elementary-middle transition was a priority for the school.

It is also important to mention that five of the ten subject experts (two former and three current) have attended a PYP workshop during the second year of their appointment. But it became apparent after further analysis that this workshop is designed for teachers who are new to the PYP and not for middle leaders overseeing the PYP curriculum. Besides, two of the current subject experts (CSE1 and CSE3) reported that they did not attend the PYP workshop because they were appointed during the COVID period.

Since a specialized PYP induction targeting the subject experts' functions was not offered, this group of middle leaders had to self-learn the different aspects of the program they need to accomplish the functions of their role. During the focus group interview, CSE1 explained that he had to learn by himself about the PYP and its approach in order to be able to understand how the Arabic curriculum can be developed along that framework. To further explain the challenges faced to oversee curriculum revision in a program he was not familiar with, CSE1 said:

> It took me a long time and a lot of effort to understand this complex process because, there are units [referring to UOI] that include parts of the Arabic curriculum while the rest of the curriculum is taught as a standalone subject … it [part of the curriculum content] is also integrated with the social studies taught in Arabic.

Insufficient Training to Lead and Manage Change. Insufficient preparation of the subject experts on how to manage the implementation of their functions that bring change in what teachers and other middle leaders consider as the norms was the second type of challenge mentioned by all the participants. The subject experts' responses indicated they were especially ill prepared to lead and manage change. They explained

that they did not face “technical obstacles” (CSE1); rather, they were mainly challenged by the resistance to change from teachers and by “finding the proper way to communicate with the different stakeholders” (CSE1). For instance, CSE2 reported facing resistance when she tried to convince the middle school teachers to adopt a more inquiry-based approach for teaching in the Lebanese program. According to her, this change initiative aimed to bridge the gap between the PYP approach, and the approach usually followed in the Lebanese program; however, her proposal was not well received. CSE4 reported another instance of resistance to bring change to the procedures when he described the difficulties he faced to convince the PYP teachers to adopt textbooks for students.

Regardless of the type of change they wanted to bring to the cycle-school where this change had to be introduced; the subject experts faced resistance and felt they lack training on how to get the buy-in of the other stakeholders. These experiences have led the subject experts to design strategies on their own to successfully induce changes. The participants’ responses show that it took a lot of on the job learning to acquire the skills they needed to lead change. For instance, FSE2 explained that with practice, subject experts became skilled in “how to build a certain level of trust” before suggesting changes in routines. She also argued that building relations is critical to overcome resistance. This was also asserted by CSE4 who talked about “how to ease mistrust” and the need to “go in small steps” to implement any change. He added that the subject experts often face resistance if they lack the skills to convince the stakeholders of a certain change, or if they are unable “to translate a change into practices and activities.” The subject experts believe they would have saved a lot of time if they were trained on how to bring in change without facing resistance.

Lack of Familiarity with Relevant Policies and Procedures. Only two of the participants reported facing the challenges of not being familiar with the school policies and procedures relevant to their supervisory functions: CSE5 who was asked to serve as a subject expert on her first year at the school, and CSE3 who is an old-returning teacher. They reported that the absence of a formal orientation to the system and the school specific practices compromised their ability to perform their role adequately. These two subject experts faced more challenges including resistance from teachers and the other middle leaders because they were new to the school system, and they needed some time to build their connections and to be accepted by the different stakeholders. Since they were not familiar with the school policies and procedures, they often referred to the more experienced subject experts for guidance on whom to address first in each cycle-school and the approach to be followed to introduce change initiatives.

Despite their prior experience, the two participants could not lead change in the same manner they did in their previous school. In fact, CSE3 explained that although she had taught at school X, a lot has changed since she left the school, and she was somehow new to many of her colleagues. She added that she was a teacher in this school before she left to another country where she had a similar position as a middle leader supervising multiple curricula. However, she could not follow the same procedures that she was using in her other school, to perform the functions of her new role as a subject expert, “because it is a different context, and a different culture.” The challenge was more critical for CSE5 who had to perform her functions while being totally new to the school system, CSE5 stated:

> Personally, like any subject expert that might be appointed from outside school X [She named the school], my personal challenge was how things happen at this

school, ... I was not familiar with these procedures, and these organizational levels.

Context Related Challenges

The analysis of the participants' responses showed that the subject experts also faced some challenges that are related to the school context. In fact, there was a widespread agreement among the seven interviewed subject experts that insufficient time allocated for their position, and the complexity of the school structure are the main contextual factors hindering them from performing adequately their functions.

Insufficient Time

All the interviewed subject experts asserted that the time allocated to perform the various functions under the assigned role was insufficient. They all argued that considering the size of the school in terms of cycle-schools, programs, and number of teachers to support; the functions listed in the subject experts' job description cannot be performed in the time officially allocated for that position. The subject experts are released for half of their official load to perform the functions under their role. This was confirmed by CSE4 who explained that the subject experts were allocated 12 hours per week to supervise multiple curricula from K to 12. However, it is stated in the job description that the release time for the subject expert is "to be determined by the president, VP for academics, and directors. Factors include, but are not limited to, the size, scope, and complexity of each subject area and the number of teachers in the designated subject area." The lack of consistency in assigning the release time needed by the subject experts to perform their functions, points that senior leaders in the school do not have a clear understanding of the role demands in the context of the selected school.

In addition, to the demanding nature of the job and the insufficient release time, all former and current experts, except for CSE2, have a fulltime contract that requires performing other functions such as teaching, overseeing a department, assisting a director, or even supervising academic affairs for the whole school. In fact, during the individual interview, CSE3 described her load during the current academic year. She stated, “this year I’m still a fulltime teacher at the secondary school, in addition to being the chemistry facilitator for CPP and IB-DP, and also a subject expert.” CSE1 shared a similar concern with a load including teaching three classes in addition to being the Arabic facilitator and a subject expert. Even CSE2, who is the only subject expert with a part time contract for this position, with no other duties, has described the subject experts’ role as “very demanding” and hence what is expected from this group of middle leaders “cannot be done in the allocated time.”

Although the participants agreed that they have a demanding role and that they need more time to perform its functions, three of them said that the subject experts must keep a teaching load to better understand the challenges faced by other teachers and to support them. For instance, FSE2 stated:

> I am with staying in class to better understand the teachers’ needs, but with a minimal load. You need the rest of your load to be mobile, to invest in time, to liaise two campuses.

Complex School Structure

The complexity of the school structure seems to constitute an additional source of challenge for the subject experts. All the participants described the school as large in size, and complex in structure with two campuses, and six cycle-schools where multiple programs are taught, and procedures are not always uniform. In fact, the school has

some policies that translate its mission statements and that are binding to all the stakeholders such as the admission policy, the academic honesty policy, the acceptable use policy in technology, the assessment policy, the language policy, etc. However, the implementation of these policies is customized to fit the students' age-group in each cycle-school.

Data analysis shows that because of the complexity of the school structure, the subject experts found it difficult to equally distribute their supervisory functions for the two campuses. They were also challenged by the lack of uniformity in the procedures followed at the six schools, and by being unequally familiar with the four programs they are expected to oversee. The next sections describe each of these challenges faced by the subject experts.

Unequal Distribution of the Supervisory Functions for the Two Campuses. The school has two campuses that are almost an hour apart. All the subject experts are full-timers on the Beirut campus where most of them teach. Hence, the subject experts were challenged to equally cater for the needs at the two campuses while being less familiar with the mountain campus. Furthermore, all the participants reported that they lacked familiarity with the procedures and the logistics on the mountain campus, which affected their readiness to perform their functions on that campus. The participants' responses showed the necessity for more frequent visits to the mountain campus to better understand the procedures followed in its two cycle-schools, to do more class visits, and to hold more meetings with the other middle leaders to better assess the needs. Additionally, FSE1 reported that "ensuring the same quality of follow up on both campuses was a big concern." She explained that because of her teaching load and the weekly meetings she had to attend, she was unable to spend a full day per week on the

mountain campus to ensure as many class-visits as possible, and to coordinate adequately with the different stakeholders.

Talking about the coordination between the two campuses, CSE2 reported that it is "still not to the best it can be." CSE1 clarified another facet of this challenge when he said:

> The distance between the two campuses has its effect, they [colleagues on the mountain campus] feel that Beirut campus is the main campus and as if the other campus is marginalized, which is not the case.

In addition to the distance separating the two campuses, the schedule constraints also compromised the ability of the subject experts to equally perform their role on the two campuses. FSE2 confirmed that catering for two campuses was "a weak point" in the functions of the subject experts. She clarified that the lack of "flexibility in the schedule" was another factor leading to this challenge. In fact, schedule constrains and the other positions they hold at the Beirut campus, prevented this group of middle leaders from dividing their time equally between the two campuses.

Interestingly, the participants reported that the challenge of keeping the balance while supervising the curricula and supporting teachers on the two campuses was partly resolved during the COVID-lockdown period since all the meetings were held on Zoom, as CSE2 clarified. Similarly, CSE4 talked about the pre-COVID period and the challenge to commute between the two campuses, and the COVID period that he described resolved the challenges to commute between the two campuses, stating that it became "easier with virtual meetings." However, this perspective was not shared among all participants. CSE4 stated that

these virtual meeting are not as efficient as face-to-face meetings, where the human aspect, eye-contact, and reading body language make it easier to convince people.

Lack of Uniformity in the Procedures Among the Cycle-Schools. All the participants agreed that the subject experts were challenged by the different procedures followed in the six-cycle schools including the degree of involvement of the director in academic decisions, and the communication channels to be followed when introducing change initiatives. In fact, the school is divided into four cycle-schools on Beirut campus and two cycle-schools on the mountain campus. Each of these cycle-schools has its own team: a director, one or two assistant directors, the department chairs or other middle leaders, the teachers, and the non-academic staff members. As mentioned earlier, the whole school is guided by its mission statements and policies; however, the procedures followed to implement these bylaws at the different cycle-schools are not always uniform, to the extent that CSE1 described these cycle-schools as "almost independent." Similarly, CSE2 stated that the school is "like six small islands and each director considers the school she/he heads as her/his school." As a matter of fact, the director has some autonomy to take academic decisions often recommended by the leadership team in her/his school. For example, the leadership team in a cycle-school may opt to implement certain teaching and learning strategies, or pilot new assessment methods, or even use specific EdTech platforms that are not necessarily adopted in the other cycle-schools. The lack of uniformity in the procedures makes it challenging for the subject experts to adapt the way to introduce change to the different procedures in the six cycle-schools.

The communication channels followed by a subject expert when suggesting change may also differ from one cycle-school to another. In certain cycle-schools any change related to the curriculum needs to be discussed first with the director, while in other cycle-schools such mission is delegated by the director either to her/his assistant or to a middle leader. During the individual interview, CSE4 shared that at the elementary school, his direct contact was the assistant director who oversees the French program. He did not need to go through the director to perform his tasks, which was not the case in the other cycle-schools. Similarly, CSE5 reported:

> In some schools...I was able to communicate with the teachers without the need for a liaison, unlike the case in other schools where we cannot even send an email to the teachers without going through the department chair or the assistant director.

Therefore, the subject experts had to adapt the way they perform their functions to the communication procedures followed in each cycle-school.

Being Unequally Familiar with the Four Programs. Data analysis shows that the subject experts faced a third type of challenges resulting from the complexity of the school structure, namely being unequally familiar with the four programs taught at this school. To successfully perform their supervisory functions, the subject experts need to be familiar with the multiple programs offered at school X including "the topics to be covered at each level" (FSE2), as well as "the spirit" of each program (CSE1).

Three of the participants confirmed that the subject experts had to self-learn some of the programs before evaluating the content of the different curricula at the transition levels.

For instance, CSE5 reported that, depending on their prior professional experience, the subject experts are definitely "novices in certain programs or in certain cycles." This limited knowledge of some of the programs made it difficult for them to oversee the implementation of some of the curricula (FSE1) and to ensure continuity in the content especially at the transition levels where students often change programs (CSE2). Talking about the transition from the elementary cycle to the middle cycle, CSE2 explained that all the students at the preschool and elementary levels start with a program that mainly follows the PYP framework, but that also accommodates for some requirements set by the Lebanese and French programs. Once they get to the middle school, most of the students join the Lebanese program, and almost one third of the student-body follows either the French program or the CPP program. Therefore, the subject experts need to be familiar with these programs to ensure that the different curricula guarantee a smooth transition for the students.

Organizational Support for the Middle Leaders

This section looks into the forms of organizational support as perceived by the seven participants, and as described in some of the school documents. By organizational support is meant any form of support related to the school structure, its policies, and the procedures that helped the subject experts successfully perform their functions and overcome the obstacles they faced when they transitioned into their new role.

During the interviews, the participants reported on the currently existing forms of organizational support, namely their clear job description, the support of senior leaders, and their regular meetings. They also suggested some other factors that can improve their work conditions such as a formal preparation for their role and more buy in from the directors for their role.

The table below shows the compiled themes and sub-themes related to the forms of organizational support, and the frequency of responses as derived from the coded interviews.

Table 7

Frequency of Interview Responses for the Themes and Subthemes Related to the Forms of Organizational Support

Themes	Subthemes	Frequency for mentioning each concept	Participants mentioning this concept
Currently Existing Forms of Organizational Support	Clear job description	3	3
	Buy-in of senior leader	10	7
	Regular meetings	11	7
Suggested Forms of Organizational Support	Formal preparation	2	2
	More buy-in at the level of directors	7	4

Currently Existing Forms of Organizational Support

To better explore the critical period of transitioning into their new role as subject experts, the participants were asked to share the different forms of support provided by the school during that period. After analyzing the participants' responses and some of the school documents, the researcher identified three currently existing forms of organizational support: the clear job description for this group of middle leaders, the support of the senior leaders, and their regular meetings.

Clear Job Description

To begin with, the participants considered the subject experts' job description as a major support for this group of middle leaders because it defines what is expected from them. Three out of the seven interviewed subject experts asserted that their job

description clearly specifies their functions. In fact, CSE1 argued that the subject experts' role "is clearly defined by its main titles, or by the job description." Similarly, FSE1 shared that the different tasks listed in the job description helped her understand her role as a subject expert.

Two participants highlighted the involvement of the subject experts in the revision of their job description. They had input on the updated version of the job description that ended up specifying the job title, to whom the subject experts report, a summary of the job, the release time for the job holders, the main duties and responsibilities, and the educational background and competencies required for this job (Job description, January 2020).

While the subject experts' job description was revised by the president, the vice-president for academics, the HR director, and the ERC director to meet the school needs, FSE1 reported that the subject experts got a first draft of their job description and that "it was modified several times to adjust it to the needs of the school" in response to the feedback from the subject experts.

The researcher obtained the very first version of the job description that was written in 2017 when these middle leaders were first appointed, as well as the most recent version (dated January 2020) that was revised after consulting the directors, and the subject experts. Comparing the two versions is not one of the goals of this study, still the researcher explored the main differences to examine how the perception of the role in this school evolved with time to emphasize academic rather than administrative leadership. For instance, according to the first draft of their job description, this group reported to the school president or her/his designee who usually deals with the administrative matters in the school. However, in the recent version the subject experts

report to the vice-president for academics; hence their academic functions are further emphasized. This change, along with other changes in the job description, are more aligned with how the subject experts perceive their role in this school.

It is important to mention that in this chapter, the researcher used the most recent version of the subject experts' job description as a source of data.

Buy-in of Senior Leaders: the President and the Vice-President

There was a widespread agreement among the participants that the school president and the vice-president for academics strongly believe in the added value of the role played by the subject experts to sustain school improvement. The participants also reported that this buy-in from the senior administration was translated into providing some resources, supporting them when faced with resistance, and encouraging them to attend different workshops that respond to their professional needs.

In fact, the appointment of the subject experts was part of an action plan set by the senior leadership team in school X to improve teaching and learning, and to ensure smooth transition of students from one cycle to another. Hence, the subject experts had the support of the senior leaders, to successfully perform the functions of their role. One form of support consisted of providing the resources that the subject experts requested, and the appropriate logistics that can improve their work conditions. This was mentioned by FSE1 who explained that the subject experts had their own working space at the ERC; a large room with a laptop for each, and bookshelves with references covering all the subject areas in the four programs. This form of support was also mentioned by CSE5 during the group interview as she stated:

> In my case, I was lucky to have a working space at the ERC, to share a common office with other experts, so I always had an old timer to refer to in case I needed some explanations or an answer to a question.

The subject experts also felt supported when the senior leaders acted as their mentors and guided them whenever they faced resistance. For example, CSE5 mentioned that the vice-president for academics proposed certain strategies that she used with some teachers who resisted the change in the approach to teach FAL. Moreover, the vice-president followed up with her until she was able to have all the FAL teachers at the secondary cycle on board. Similarly, FSE2 explained that because the vice-president is also a subject expert, she shared with them "those growing pains" and she valued their efforts even if they did not always lead to the expected outcomes. The value of the senior leaders' support was also noted by CSE4 who stated, "what is important in all this is to feel we have the full support of the president and the VP."

The senior leaders did not only provide moral support and advice to the subject experts, but they also included them occasionally in some of the school's strategic meetings. Two participants reported that the subject experts were invited to attend some of the directors' meetings and to present their work to their senior leaders. CSE4 explained the importance of this action. He stated:

> Also, what was very useful was to invite the subject experts to the directors' meetings when needed, and to some leadership meetings with the PYP coordinators, department chairs, and facilitators to make sure the full chain functions well and that people at the different levels know exactly their role and functions.

In addition to being supported by the senior leaders, the subject experts were also encouraged to attend workshops that offer the skills needed to effectively perform some of their functions. Although these workshops were not specially designed for this group of middle leaders, the participants' responses indicate that they addressed some of their needs.

As part of the school's professional development procedures, all the stakeholders are expected to attend conferences and workshops offered by local or by international organizations in addition to the in-house training, in order to sustain their professional growth.

Three of the seven interviewed subject experts mentioned specific workshops that helped them in performing their functions. First, the induction into the PYP environment, which according to FSE1 was necessary "to understand the PYP framework and how it guides the development and implementation of the curriculum." FSE2 also explained the importance of this PYP training "to understand their jargon…, to know their expectations, and to accept things they do."

The second workshop that was mentioned by three participants was the training offered by the Danielson Group. This training consisted of a series of workshops planned over two years and it mainly addressed two areas: training the senior leaders on the Danielson Framework and training the teachers on students' engagement. The first training targeted the senior and middle leaders and it focused on using the "Framework for Teaching Evaluation Instrument" before, during, and after classroom observations in order to support the teachers' professional growth. FSE1 clarified that the workshops by the Danielson Group focused more on growth than on evaluation. She reported that this

training helped her better understand one function of the role that of supporting teachers. She said:

> The subject experts are not here to assess the teacher, they are here to help the teacher grow and if you find anything that goes wrong, to interfere with, to help the teacher get over the problem and not just say she teaches well or she does not teach well.

Similarly, FSE2 explained the importance of this training for the subject experts because it facilitated defining "factors for supporting teachers.'' The participants clearly explained how this training helped them develop a growth mindset and conduct evidence-based assessment of the teachers' needs. However, none of the participants shared how teachers' support was done and how it influenced the type of training offered to the teachers based on their needs.

The second training by the Danielson Group was offered to the teachers and to the middle leaders and it focused on how to enhance students' engagement to improve learning. CSE2 described this training as useful for her as a teacher and as a subject expert. She said:

> The Danielson [training] was a good training because it provided strategies on how to enhance students' engagement. We thought we know how to do it, but in realty we did not. For me I consider myself as successful if I was able to engage my ES students [Grade 12 student in the Economics section], those for whom Math is not a major subject.

The subject experts were still guided by the Danielson framework during the on-line teaching period. However, they were using the modified version of this framework, known as the "Danielson Framework for Remote Learning" published in August 2020,

to observe classes held via Zoom and to check the teachers' Google classrooms, in order to oversee the implementation of the curricula and to provide support for the teachers. The training by the Danielson Group was described by all the participants as very successful, not only for the relevance of the content to this group of middle leaders, but also because of the follow up provided by the school and by the trainers. This aspect will be discussed in detail when addressing the fourth research question.

Two of the participants also talked about the workshop by an IBO trainer on the Approaches to Learning (ATL) where they explored strategies used by the teachers to develop students' skills and attitudes and to prepare them for life after school. According to the IBO, "the IB approaches to learning skills (ATL) are grounded in the belief that learning how to learn is fundamental to a student's life in and out of a school context. In broad terms, IB programmes support learners in developing thinking skills, communication skills, research skills, self-management skills, social skills." (IBO website) FSE2 explained the importance of this training for the subject experts to better support teachers as they plan their UOI and to put more emphasis on developing specific skills and attitudes. Similarly, FSE1 stated "the ATL workshop was very helpful because it addressed the 2021 skills, that can be developed regardless of the content and what students need in all subjects in life."

Regular Meetings

All the seven participants regarded their weekly meetings as their main source of support. These meetings were used for reporting on the progress of the different initiatives, involving the directors and the other middle leaders in planning for the change initiatives in their schools, discussing the obstacles faced by the subject experts, and providing mutual support. In fact, during the focus group interview, CSE3 stated

“the support I got was not by reading a policy, or something written. It was the social interaction with my colleagues, the other subject experts who were my mentors.”

The participants asserted that these regular meetings enhanced the collaboration between the subject experts and kept them updated on the academic decisions taken by the senior leaders and that are related to their role. During their meetings, the subject experts discussed the tasks they are expected to perform at the different cycle-schools, and they also reported on the progress of these tasks. This was confirmed by CSE4 who stated:

> We have the weekly meeting with the VP who coordinates and heads this project. Each expert shares his progress, obstacles, what was achieved and what was not achieved and why.

The participants also explained that what enhanced the usefulness of these meetings is the presence of the vice-president among this group of middle leaders which ensured the liaison of the subject experts with the school senior leadership team. The participants reported that when needed, the vice-president for academics also used these meetings to clarify the role of the subject experts, and to share the details of any initiative that was resisted, with the cycle directors or with the other middle leaders, and to have their input on the implementation plan. This was pointed out by FSE1 who said, “whenever there is a problem that we encountered the VP used to invite stakeholders to the meeting and explain it all to clarify the role to make things smoother.”

Furthermore, these meetings were used as a forum to share the difficulties faced by the subject experts, and how they worked around these obstacles. When talking about these meetings, CSE5 said “this is where each one of us can share the problem

he/she faced and how he/she solved it, how the teachers reacted to a specific intervention."

Finally, all the participants mentioned how these meetings reinforced the team spirit among the subject experts and how they supported each other. For instance, during the group interview CSE5 talked about the support she got from the other subject experts who are more experienced than her including the two former science experts. She reported:

> They give you guidelines because they were the previous subject experts. They were an excellent support system for me because they gave advice on how to deal with things, what to expect and what are the things that I should do.

Similarly, CSE3 argued that the school "has a big group of professionals … who believe in team spirit, who believe that together we can make it."

Suggested Forms of Organizational Support

In addition to sharing the existing forms of organizational support, the participants suggested two other forms that can further support their role in this school: offering a formal preparation for the role and securing more buy-in from the directors.

To begin with, two of the seven participants mentioned the importance of a formal preparation for the novice subject experts on their functions. "Now after four years, everybody agrees that we need preparation, and that the ERC will be in charge of this preparation" said CSE1. "When we [referring to the subject experts] attend any workshop offered by the school to be prepared for this role... We need to be trained as trainers and after that we adapt this training to fit the needs of the departments we support" added CSE4.

The participants agreed that a formal preparation for this group of middle leaders would not be sufficient without securing more buy-in from the directors of the different cycles. Four out of the seven participants suggested that securing the directors' buy-in will facilitate the tasks to be performed by the subject experts and will reduce the teachers' resistance to change. This cannot be achieved without the directors gaining a better understanding of the role of this group of middle leaders and by including them in the decision-making process, especially the one related to improvement initiatives, at the level of the cycles at least. For instance, CSE4 argued that when the director at one of the cycles encouraged his classroom visits it resulted in him feeling accepted by the teachers. This was also pointed out by CSE5 who said, "that is why it is important that directors understand and support our role, for teachers to be also on board." Talking about the importance of the directors' buy-in, CSE1 said:

> It [referring to organizational support] depends on the people you are working with, more specifically the director who can make the best use of the subject expert and bring up his positive role.

Two participants suggested more frequent meetings between the subject experts and the director of each cycle, to secure the directors' buy-in. These meetings do not only aim to help the directors better understand the subject experts' functions and become aware of the obstacles they faced, but also to involve them in any change initiative in their schools. In fact, during the group interview, CSE4 suggested meeting with the director of each cycle before introducing any new initiative "to look at things from different perspectives, and to have common decisions."

What the participants perceived as insufficient buy-in from the directors seem to be related to the lack of effective change management at the level of senior leadership

and the school as a whole; however, this hindering factor was not mentioned as such by the participants.

Preparing Novice Middle Leaders: A Proposed Induction Program

The participants' perception of preparing novice subject experts for their role in this school was investigated by asking them to describe the design characteristics of an induction program that can be adopted by the school for that purpose. By design characteristics, it is meant the content of the proposed program in terms of topics to be trained on, the approach to be followed when implementing such a program, and the practices to be used in alignment with the approach. The participants' responses only addressed two of these characteristics, namely the content and the approach. Despite the probes used by the researcher during the individual interviews, none of the participants shared practices that can be used as part of the induction program to cover the suggested content. The next sections will separately explore each of the proposed content and approach as perceived by the participants.

The table below shows the compiled themes and sub-themes related to the design characteristics of the proposed induction program, and the frequency of responses as derived from the coded interviews.

Table 8

Frequency of Interview Responses for the Themes and Subthemes Related to the Design Characteristics of the Induction Program

Themes	Subthemes	Frequency for mentioning each concept	Participants mentioning this concept
Content of the Proposed Program Suggested by the Subject Experts	Role-Functions Topics	14	7
	Interpersonal Skills	9	7

Procedure for Implementing this Program	Ongoing training	8	6
	Encourage mentoring	2	2
	Flexible plan	3	3

Content of the Proposed Induction Program

Despite the overall agreement among the participants that they lack formal training on some of their functions, they found it difficult to suggest topics for an induction program aiming to prepare novice subject experts for their role in this school. One participant (CSE2) could not even see the possibility of having such a program. She stated **"**He [referring to the subject expert] has to prepare himself. The school cannot have such a program."

Still the participants' responses revealed two categories of topics that can frame the content of the proposed program: topics addressing the needs related to certain functions under the subject experts' role, and topics that can develop their interpersonal skills.

Role Functions Topics

Based on the individual and group interviews, five topics were identified by the participants as essential to prepare novice subject experts for their role in this school. The participants suggested training novice subject experts on: (a) any of the four programs they are not familiar with, (b) how to write curriculum material, (c) strategies for supporting teachers, (d) how to become trainers, and (e) adapting school initiatives to the needs of their subject areas.

The seven participants agreed that the training they have received on using the "Danielson Framework for Teaching Evaluation Instrument" to support teachers'

growth helped them perform a major function of their role. However, none of them suggested this topic for the content of the induction program, because they know that the school is committed to train all novice leaders on how to use the framework during classroom observations.

To start with, four out of the seven participants argued that the subject experts need to be familiar with all the programs offered by the school. They argued that becoming familiar with a program is not limited to knowing the content of its curriculum; rather, the subject experts must also be familiar with how this content is delivered and how the students' learning can be assessed according to this program. FSE1 explained that because she was not familiar with the PYP, the training she got on that program the second year after her appointment helped her to evaluate the curricula at the preschool and elementary cycles. She also felt more comfortable to suggest additional science topics that could be integrated under the general themes of the UOI, and to develop activities aligned with the PYP framework. The need to be familiar with the programs offered at the school, was also pointed out by FSE2 who stated:

> For instance, the things that we learned on our own, if we had them in a more structured way, such as learning about the different curricula. We spent a lot of time trying to figure out what different programs comprise, the Lebanese, CPP, other international, etc.

Moreover, two of the participants explained that the subject experts need continuous training on any updates to these programs such as the "ATL in the IB program", said CSE2 and "the special courses in the French program- les spécialités", said CSE5.

The second topic suggested for the content of the induction program was a training on how to write curriculum material. The subject experts did not actually design a complete curriculum. The tasks they described during the interviews included designing sporadic activities such as developing a scope and sequence for a cycle-school, writing lessons, designing activities mainly for the elementary cycle, and acting as consultants for the teachers as they developed activities and unit plans for the CPP curriculum. Three out of the seven participants emphasized training this group of middle leaders on specific tasks related to curriculum design. For instance, CSE3 suggested training novice subject experts on how to design a lesson plan, a unit plan, and a scope and sequence. This was also suggested by FSE1, who noted:

> Writing curriculum material is a complex task and we definitely need to be trained on that. Personally, I had some courses at AUB for my TD [teaching diploma] and that helped me understand the structure of a curriculum, the importance of spirality in a scope and sequence, the need to avoid redundancy, and to suggest age-appropriate content and skills.

The third topic that was suggested by four of the seven participants, was preparing novice subject experts on how to support teachers. This confirms the importance they give to this function. As mentioned in the previous section of this chapter, all the subject experts were trained by the Danielson Group on how to use the "Framework for Teaching" as an "Evaluation Tool" and also for needs assessment to support teachers and facilitate their professional growth. According to FSE1 "there is a need for experts to learn how to observe teachers, without being threatening and to use it [referring to the observations] as a growth tool and not as an assessment." To properly support the teachers, the subject experts must address their individual needs and adapt

the form of support to the students' age-group at the different cycles. This was pointed out by CSE5 who argued that novice subject experts need to be prepared on how to support teachers while taking into consideration the age-group of the students these teachers work with.

The fourth topic was about training the subject experts on becoming trainers. All the interviewed subject experts talked about designing and running professional development sessions for the teachers. However, only two out of the seven participants suggested training the subject experts to become trainers, as a topic for the content of the induction program.

In fact, the subject experts related that they trained teachers at the preschool and elementary cycles on the new content to be added to the UOI. They also worked with the teachers at the middle and secondary cycles on how to make their teaching strategies more student-centered. CSE1 noted that preparing novice subject experts must include addressing their needs as potential trainers since supporting teachers' learning is a function they are expected to fulfil. He clarified:

> What I mean is training the subject expert on how he/she can train teachers, training the expert to become a trainer. Training not only for the sake of acquiring new knowledge, but also to be able to transfer this knowledge.

Similarly, FSE1 suggested preparing the novice subject experts on how to design and offer workshops for teachers. She asserted that "there should be training on how to structure PD sessions."

Finally, one of the participants (CSE1) proposed training novice subject experts on how to adapt school wide initiatives to fit the specific needs of a subject area. He stated:

> The Danielson Framework, which is a binding framework for the whole school, cannot be used in exactly the same way for the different subjects. So here the expert needs to be trained on how to apply such framework to match the specificity of his/her subject.

Interpersonal Skills

In addition to the five suggested topics that can prepare novice subject experts for their supervisory functions, the participants asserted that the proposed induction program should focus on developing the interpersonal skills of this group of middle leaders namely communication skills, emotional intelligence, and maintaining positive interpersonal relations. The participants' responses also show that novice subject experts need to be trained on how to use each of these skills as they collaborate with the other leaders in the school, with the teachers, and among each other.

Five out of the seven participants argued that the subject experts need to have very good communication skills. For instance, FSE1 said "I believe that a subject expert should be somebody who is able to communicate with others. It's not easy to deal with all concerned parties." Developing communication skills, requires training on how to be a good listener. When the different stakeholders are listened to, they feel part of the decision-making process and they show less resistance. This was pointed out by CSE3 who stated, "I learned to be a good listener...especially at the beginning until you figure out the approach for each person you need to collaborate with."

The subject experts agreed that to be able to perform their instructional supervisory functions, they need to be continuously communicating with the different stakeholders in the school. Before implementing any change in a cycle-school, they need to start by explaining the why and how to the directors. Hence, they need to

convince those who have “power over letting subject experts” implement the change without facing much resistance, explained FSE1. The subject experts stated that they need to involve the other middle leaders in planning for the implementation of new initiatives, to have their buy-in and to avoid any overlap with their functions. They have to communicate with them as peers and therefore “being diplomatic and transparent is very crucial” said CSE3. Finally, they pointed that when they directly work with teachers, they must encourage them to look at change as part of their professional growth and to support them all through the process, and this too requires other communication skills. This was pointed out by FSE1 who clarified that “the most important thing is how to deal with teachers … As an expert you should know that you are here to support them and to have their input, and not to impose your own strategies.”

In addition to developing communication skills, two of the seven participants argued that emotional intelligence is necessary to develop good interpersonal skills. It helps understand how to deal with others and how to make them feel comfortable while implementing change. During the focus group interview, CSE2 stated that “when the school administration chooses an expert [referring to a subject expert], it’s not only because he/she is an expert in the content knowledge in his/her area, but also because they have emotional intelligence.” She added that the subject experts must be empathetic and must look at the needs of others from their perspective. Similarly, FSE2 clarified that the subject experts use their emotional intelligence to be accepted by the different stakeholders they collaborate with.

Maintaining positive interpersonal relations was mentioned by four of the participants as one of the skills to be targeted when inducting this group of middle leaders into their profession. To further develop this skill, novice subject experts must

be trained on how to be diplomatic, how to be transparent when collaborating with others, and how to gain their trust. In fact, CSE1 stated that “Interpersonal relations have a major effect on the functions of a subject expert because you often need to be diplomatic.” Similarly, CSE3 argued that a subject expert needs to be diplomatic when introducing any change initiative, and transparent when collaborating with the different stakeholder. Furthermore, the participants asserted that gaining the trust of the teachers and the other middle leaders favors positive interpersonal relations. As pedagogical leaders the subject experts are expected to maintain good relations with the different stakeholders in the school, and for that purpose they rely on “trust more than authority” said FSE1. This was also mentioned by FSE2 who explained that with practice, the subject experts became skilled in “how to build a certain level of trust” before suggesting changes in routines. She also argued that building relations is critical to overcome resistance. This was also asserted by CSE4 who talked about “how to ease mistrust” and the need to “go in small steps” to implement any change.

Approach for Implementing the Proposed Induction Program

When asked about their perception of the best approach to implement the proposed induction program that aims to prepare novice subject experts, the participants suggested three main characteristics for this approach. It must accommodate for on-going training, encourage mentoring, and have a flexible plan to cater for the emerging needs of this group of middle leaders.

First, there was a widespread agreement among the participants that novice subject experts need ongoing training that starts at the beginning of the academic year, and ensures follow-up during the year. Six out of the seven interviewed subject experts argued for on-going training and recommended some form of follow-up to the induction

week taking place at the beginning of the academic year. For instance, FSE1 said “I think it's not only enough to give the induction training at the very beginning of the year, but I think there should always be an ongoing training during the year.” The participants clarified that preparing the novice subject experts for their functions can start during the induction week reserved by the school to prepare all the stakeholders, especially the new hires, for the academic year.

The analysis of the school documents and the observed practices show that the program for the induction week addresses new school-wide initiatives as well as the specific needs for each cycle-school. The subject experts have their share during this week; however, the training they receive often targets all the middle leaders, and it is not planned as a formal preparation. When talking about the induction week, the participants argued that it must include specialized sessions for the subject experts beyond what is offered. CSE5 asserted that, “it is helpful to plan for sessions addressed to the subject experts during the induction week.” Most of the participants confirmed that preparation should start during the induction week; however, it must continue during the two in-service days reserved for professional development through the course of the year. This point was raised by CSE3 who noted “we have in-service twice per year and we can have one session related to this [referring to training the subject experts].” Similarly, CSE1 stated:

> Start with a training session at the beginning of the year, over one day, two days, depending on the topic, then you have regular meetings for follow-up. During the in-service day the expert transfers this knowledge to the teachers.

Besides, two of the participants referred to the Danielson training to propose a similar approach for the proposed induction program. They believe the training program

offered by the Danielson Group was successful because it was planned over two years; providing two to three days of intensive training and regular follow-up during implementation. The program allowed the trainees, including the subject experts, to apply what they were trained on and to get some form of support from the trainers after a few months of implementation. This plan was described by CSE1 who said:

> Why is the Danielson experience a successful one? Because we were guided to move from theory to practice. So practically, we have a training session at the beginning of the year with some practices that I can implement in my subject, and later get some feedback.

Similarly, FSE2 explained that the Danielson training "was planned over two years with follow up and adds on … some training was offered at the beginning of the year and then a few months later let's see it at a different level; give me your feedback and here is more."

Another suggestion given by three of the participants was to have an induction program that encourages mentoring of novices by more experienced subject experts. For instance, during the group interview, CSE5 emphasized the need to mentor novices when she stated, "maybe it is a good idea to have a mentor for novice experts; I was lucky, unofficially I had two mentors who were available to help me."

Talking about the importance of mentoring novices, CSE4 argued that newly appointed subject experts can work under the guidance of the expert they are replacing for at least one term "to ensure a smoother transition." CSE3 supported this suggestion by reporting that she was informally mentored by FSE1 and FSE2 who did not only explain the tasks they performed before her appointment, but they also supported her when she faced resistance. Hence, the participants' reference to mentorship included

guidance to understand the subject experts' tasks and the best approach to perform them.

When talking about the implementation of the proposed induction program; two of the participants argued that the flexibility of the implementation plan is also an important characteristic of the approach. The plan to be set by the school for preparing novice subject experts might need to be modified based on the subject experts' feedback and their emerging needs during the school year. This point was raised by FSE2 who talked about evaluating the training during the year, and the possibility of modifying the implementation plan. Similarly, CSE4 mentioned assessing the induction program "after a certain period of implementation." According to FSE2 "you also need their [referring to the subject experts] feedback; was it useful or not, what else do you need."

Chapter Summary

This case study aimed to explore the challenges facing middle leaders performing instructional supervisory functions and to examine their professional needs in order to identify the design characteristics of an effective induction program to prepare them for their functions in the context of the selected school. This chapter reported on the findings that answered the four research questions guiding the study.

The results regarding the role of the selected middle leaders with the position title "subject experts'' were reported as a definition for the role describing them as pedagogical leaders, resource-person for teachers, and implementors of change. The results also led to developing a profile for the role occupants that encompass characteristics that can be used as selection criteria of the role occupants. As for the functions of the role, the participants described several tasks they performed in the school which matched those listed in their job description. The researcher classified the

reported functions under four categories: coordinating the development of multiple curricula, supervising curriculum implementation at the different cycles, evaluating these curricula, and supporting teachers.

The participants were also asked about the challenges they faced when they transitioned into their new role. They related four types of challenges that were classified as role-related challenges, and context-related challenges. Under role-related challenges, the participants mentioned the lack of a shared understanding for the role, and the insufficient preparation of this group of middle leaders. As for the context-related challenges, two factors were perceived by the participants as hindering their functions: insufficient time allocated for their position, and the complexity of the school structure.

The middle leaders participating in this study also reported on some factors that supported them while transitioning into their new role. They all agreed on three currently existing forms of organizational support, namely their clear job description, the support of senior leaders, and their regular meetings. Besides, the participants suggested two other factors that can improve their work conditions: formal preparation for their role and more buy-in from the directors.

Lastly, the participants were asked to describe the design characteristics of an induction program that aims to prepare novice middle leaders for their instructional supervisory functions in the selected school. Despite the overall agreement among the participants that they lack formal training on some of their functions, they found it difficult to suggest topics for the proposed induction program. Still the participants' responses revealed two categories of topics that can frame the content of the proposed program; topics addressing the needs related to certain functions under the subject

experts' role, and topics that can develop their interpersonal skills. As for the procedure for implementing the proposed induction program, the participants suggested three strategies for this procedure. Namely, the implementation procedure must accommodate for on-going training, encourage mentoring, and have a flexible plan to cater to the emerging needs of this newly formed group of middle leaders.

CHAPTER 5

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Qualitative single case-study design and methods were used to collect and analyze data to answer the research questions guiding this study. The four research questions aimed to understand the role and functions of a group of middle leaders with instructional supervisory functions in a private Lebanese school, and to explore the challenging and supporting factors when they transitioned into their role. Another outcome of this study is to come up with a plan for preparing this group of middle leaders for the functions of their role in the selected school.

This chapter includes the discussion of the findings under each research question, the conclusion, the recommendations for practice in the form of a plan for a suggested induction program, and the recommendations for future research.

Discussion of the Study Results

The first section of this chapter presents a discussion of the study results where the findings under each research question were first summarized and then compared with what has been found in the reviewed literature. This section aims to situate the findings against existing literature on middle leadership, instructional supervision, professional development, and adult learning. It also aims to develop a deeper understanding of their implications on practice, and future research.

Most of the findings related to the role and functions of middle leaders, the hindering and supporting factors affecting their role, and their perception of an effective training program aligned with the results of the reviewed literature. However, some aspects emerged as unique to the school context and shaped by it. Aspects aligned with

the reviewed literature and those that are unique to the context will be specified in each of the next sections.

Role and Functions of Middle Leaders

The middle leaders participating in the study were asked to describe their role and their instructional supervisory functions in the selected school. The participants' responses revealed that aspects of their role are similar to those found in the reviewed literature. These aspects included the context-related conception of the role, the complexity of the role, and the hybrid responsibilities associated with it (De Nobile, 2018; Gurr & Drysdale, 2013; Irvine & Brundrett, 2016; Itani-Malas, 2019).

Data analysis related to the tasks performed by the middle leaders participating in this study shows them to be partially aligned with the models on effective instructional supervision as described in the reviewed literature. The aligned aspects cover the three domains of supervisory functions described by Pawlas and Oliva (2008) including instructional development, curriculum development, and staff development, some technical and cultural responsibilities of instructional supervisors as portrayed in the conceptual models by Gilckman et al. (2010), and by Chmeissani (2013). However, aspects related to leadership, collegiality and community building were missing from the participants' description of their functions.

Aspects of the Role and Functions Aligned with the Literature

Analysis of data regarding the instructional supervisory role and functions, generated aspects performed in this school, that transcend organizational and cultural contexts and others that are partially shaped by the local organizational culture specifically the exposure to the international practices through the adoption of the diverse curricula at the school. The role was described as encompassing pedagogical

leadership, being a resource-person for teachers, and implementors of change. These facets of the role are aligned with how the role of middle leaders with instructional supervisory functions was described in the reviewed literature. Additionally, the study results and the reviewed literature align in two other role-related aspects, namely the complexity of the middle leaders' role and their hybrid responsibilities.

As for the functions of the role, they partially aligned with the reviewed literature. On one hand, all the participants agreed on four types of instructional supervisory functions they are expected to perform in this school: coordinating the development of multiple curricula, supervising curriculum implementation at the different cycles, evaluating these curricula, and supporting teachers as they implement the multiple curricula. On the other hand, the curriculum-related functions of the participants extend beyond the reviewed Lebanese studies, while their function to support teachers shows some discrepancy with the Western literature and agrees with the findings of the reviewed Lebanese studies.

The facet of the middle leaders' role as pedagogical leaders aligned with international literature including the studies conducted in the Lebanese context. For instance, the study by De Nobile (2018) presents "middle managers" as focusing more on strategic tasks targeting staff development and academic improvement. Similarly, Chemaissani (2013), characterized the role of school leaders performing instructional supervisory functions as "instructional leaders."

Acting as a resource-person for teachers is another aspect of the role identified by the participants. The literature confirms the importance of this aspect of the role by identifying collaboration with teachers as essential for effectively performing supervisory functions. According to Harris and Jones (2017) one of the main criteria to

determine the quality of supervisory functions performed by middle leaders is the extent to which they take responsibility in collaborating with teachers and in providing them with continuous support. Similarly, Gilckman et al. (2010) argue that supervision mainly aims at building teachers' capacity until they reach a developmental level where they can become fully responsible for improving the teaching and learning process in their classes. Studies conducted in some Lebanese schools came to a similar conclusion regarding the role of middle leaders in supporting teachers. The results of the study by El Murr (2015) associated promoting teachers' professional learning with the proficiency of instructional supervisors, and their availability to provide regular feedback that takes into consideration the teachers' professional needs.

In addition to perceiving the middle leaders in this school as pedagogical leaders and as resource-person for teachers, the participants' views on their role as implementors of change also aligned with the ones in the literature. This facet of the role was mentioned by Harris and Jones (2017), who assert that middle leaders oversee change initiatives and hence, play a major role in school reform. Similarly, Ng and Kenneth-Chan (2014) emphasize the importance of middle leaders maintaining school improvement. This alignment holds with what was found in the literature on instructional supervision in the Lebanese context. Acting as an agent of renewal was one of the responsibilities in the instructional supervisors' profile as proposed by Chmeissani (2013). Similarly, the study by Jureidini (2018) recommends training school leaders on how to lead change and monitor school improvement.

Interestingly, and despite the differences in the cultural context, as well as the differences in the organizational context within the Lebanese culture, the results point at two additional areas of agreement between the reviewed literature and the findings of

this study, namely the complex nature of the role of middle leaders and their hybrid responsibilities. In line with their Western counterparts, the participants asserted when describing their role in this school, that it is a demanding role with many responsibilities including teaching, management, and leadership that requires performing numerous functions (De Nobile, 2018; Gurr & Drysdale, 2013; Irvine & Brundrett, 2016; Javadi et al., 2017). The demanding nature of the role enacted by instructional supervisors also agrees with the results of the studies conducted in the Lebanese context. In fact, Chmeissani (2013) describes the work of instructional leaders as "overwhelming" given the wide array of tasks constituting the profile of these leaders in Lebanese schools. Itani-Malas (2019) also identified hybrid responsibilities assigned to teacher-leaders in Lebanese schools, similar to those found in this study and in Western studies. The observed alignment with international literature regarding the conception and the characteristics of the middle leaders' role might be explained by the role demands imposed by some western organizations through accreditation.

As for the curriculum-related functions, data analysis shows that the tasks performed by the participants to oversee curriculum development partially align with the reviewed literature. These tasks concur with two of the three categories within the scope of responsibility of curriculum leaders as described by Boukaert and Kools (2018): curriculum developers and curriculum makers. In fact, the scope of responsibility of the middle leaders participating in this study ranged between curriculum developers who for certain programs partly modify the content by changing the sequence, supplementing, and deleting some topics (Shawer, 2010), and curriculum makers who fully adapt the content of the curriculum to fit the needs of their students (Boukaert & Kools, 2018).

Interestingly, the scope of responsibility described by the middle leaders participating in this study, extends beyond that found in the Lebanese context. For instance, the results of the study by Chmeissani (2013) show that instructional supervisors in Lebanese schools are not involved in designing the curriculum; instead, their tasks were limited to planning for and managing the implementation of the curriculum.

The study results agree with the reviewed literature on that overseeing curriculum implementation is often assigned to middle leaders performing instructional supervisory functions. The middle leaders participating in the study described three tasks that enabled them to supervise the implementation of the multiple curricula adopted by the school, namely ensuring that these curricula are properly implemented, and overseeing the vertical articulation of the curricula across the cycles as well as the horizontal articulation between the two campuses. Glickman et al. (2010) confirm the importance of this function performed by instructional supervisors. Similarly, the study by Chmeissani (2013) found that middle leaders in Lebanese schools are often overloaded with supervising the implementation of school curricula and improving instruction.

However, the study results show that the broad scope of this function at the school did not include providing teachers with a clear process to implement the curriculum as depicted in the Western literature. Gurr and Drysdale (2013) advance that middle leaders provide “operational guidance” to teachers to help them implement and evaluate curricular changes. Similarly, Glickman et al. (2010) depict involving teachers in decision-making regarding the process to best implement school curricula. Rather, the results of the study are more in alignment with responses of Lebanese middle

leaders participating in Ghamrawi's (2013) lacking any reference to a systematic process to oversee curriculum implementation.

An additional discrepancy with the Western literature- while showing alignment with the Lebanese context- was apparent in two major tasks performed by the middle leaders to support teachers to properly implement the multiple curricula taught at this school: assessing teachers' needs and providing training to meet these needs. Western literature on middle leadership emphasizes the added value of supporting teachers while implementing school curricula. According to Gurr and Drysdale (2013), one of the instructional supervisors' key responsibilities is to help teachers successfully implement school curricula by providing guidance and regular follow-up. The role of leaders at the middle tier is to positively affect the quality of teaching and learning through support to teachers while adapting new classroom practices (Harris et al., 2019). While the reviewed studies conducted in some Lebanese schools also highlight the role of middle leaders in supporting teachers; however, the findings of these studies describe a directive approach to providing support (Hashem, 2013) that is not based on a well-defined professional development plan (El-Murr, 2015). This discrepancy in how this role is performed is most likely a reflection of the prevailing organizational arrangements in Lebanese schools where it is not mandated that supervisors develop professional development plans for teachers' growth, which is unlike what is usually found in the Western literature (Glickman et al. 2010).

In summary, while supervising curriculum implementation and supporting teachers appear as components of the instructional supervisory role, they are missing standardized processes that occupants of this role must follow. This discrepancy might be because policies about instructional supervision are poorly formulated and do not

include mandates to follow. However, the alignment with Western literature regarding curriculum development and going beyond the scope of responsibility as found in the Lebanese studies might be explained by the exposure of these middle leaders to some international curricula and the demands from these curricula through accreditation that imposes additional tasks on the curriculum-related supervisory functions.

Aspects of the Role and Functions Unique to the Study Context

Despite the abundant alignment of many aspects of the role and functions of the middle leaders in this school with the findings of the reviewed literature; other aspects proved to be unique to the school context. Some seem to be shaped by the Lebanese context and others by the unique organizational arrangements and mission of the school under study including its multiple curricula. Considering prior instructional supervisory experience as a criterion to successfully transition into the middle leaders' role and overloading middle leaders with tasks related to curriculum implementation, confirm the findings of some of the studies conducted in the Lebanese context. On the other hand, having a role associated with teachers' support rather than inspection, and performing functions related to developing and evaluating curricula, appear to be uniquely shaped by the organizational context of the school under study.

According to the participants, two attributes were mentioned as selection criteria of candidates to the role of middle leaders. Participants agreed that these must include a good knowledge of the school system and prior instructional supervisory experience. This finding can be explained by the chronic lack of formal preparation in the Lebanese context for those assigned to instructional supervisory roles. The reviewed studies conducted in Lebanese schools show that the lack of preparation of school leaders is common to all, which is unlike the situation in the Western context where school

leaders are expected to receive pre-service training, and often complete induction programs to prepare them for their functions. Furthermore, the findings also reflect the unique conditions of the selected school as one of the most reputed private schools in Lebanon that attracts highly competent and experienced teachers. Because of its affluent resources, the school has a high capacity to retain its teachers. This constantly provides its administration with a pool of highly experienced teachers who in addition to their high skill level are familiar with the school, to select from when there is a need to appoint new middle leaders.

On the other hand, having the role of a resource-person for teachers and not that of an evaluator is an area that is unique to the organizational context of the school under study. All the participants agreed on clarifying that their role in this school is not to evaluate teachers, which is unlike what was found by research conducted in other Lebanese schools. In fact, the findings of the study by Chmeissani (2013) reveal that evaluating teachers is more central to the role of instructional supervisors than creating a collaborative culture that support professional development and change.

However, and despite the emphasis on providing support to their teachers, the participants in this study failed to clearly describe the formative aspect of this supervisory function. This stands in stark contrast to the Western literature describing continuous cycles of formative evaluation that identify the individual developmental needs as a central function of instructional supervisors to build teachers' capacity. Glickman et al. (2010) advocate that supervisors need to adapt their supervisory approach to the developmental level of the teachers in order to gradually help them develop their capacity to teach independently. Although the senior and middle leaders in this school were trained to use the Danielson framework to support teachers' growth,

the misalignment with the Western literature on formative evaluation, may be due to some contextual factors, mainly the absence of standardized procedures that delineate formative evaluation practices in connection to the teachers' professional development. Another factor seems to be related to the fact that many middle and senior leaders are expected to simultaneously support and evaluate teachers, something that could have resulted in confusion among supervisors on the scope of this responsibility and on how to perform its functions.

Other supervisory functions that the study found, and that seem to be shaped by the school organizational culture, and more specifically its mission to offer multiple curricula, are the curriculum-related functions. In fact, the seven participants reported that supervising the implementation of multiple curricula takes most of their time. They also agreed on the centrality and the broad scope of the tasks related to supervising the development of the multiple curricula taught in this school. This finding diverges from what was found in the international literature describing supervisory functions as primarily focusing on teachers' growth and collaboration on instructional improvement (Glickman et al., 2010). Similarly, in the instructional supervisory model proposed by Chmeissani (2013), the focus on the curriculum and instruction responsibilities was minimal in comparison to the remaining responsibilities especially professional development and human resources, aiming to support teachers and to build their capacity.

Interestingly, data analysis reveals a scope of responsibilities related to curriculum development that transcends what was found in the reviewed Lebanese studies. The studies conducted in the Lebanese context found curriculum development tasks missing from instructional supervisory functions. Chmeissani (2013) argues, that

in the Lebanese context responsibilities related to supervising the development of school curricula, are limited in scope especially when compared to those described in Western literature. On the other hand, the participants clarified that for some programs such as the CPP and the IB-PYP, their scope of responsibilities included collaborating with other middle leaders and with teachers to modify and develop full curricula or sections of the curricula.

Data also shows that the role of the middle leaders performing instructional supervisory functions in the school under study, also involves revising these curricula based on the goals set internally by the school and the requirements of the external organizations that develop the adopted curricula. A function that was not captured in studies in the Lebanese context yet was aligned with what is found in the Western literature. When describing their function of evaluating the different curricula, the participants agreed that it involves three main stages: revising the curricula as currently implemented, identifying areas that need updating, and coordinating with other middle leaders to update these curricula. Boukaert and Kools (2018) specify some of the responsibilities of curriculum leaders such as updating course material, applying new insights, and enhancing coherence within the curriculum. Similarly, Glickman et al. (2010) advance that the supervisors and teachers are expected to work together to evaluate the content, the organization of the curriculum, as well as the way it is implemented. On the other hand, in Chmaissaini (2013), instructional supervisors have a limited role in evaluating the curriculum and only focus on assisting teachers in implementing the school curricula and improving instruction. These results are not surprising given the exposure of the school under study to the international programs it has committed to adopt which shaped its organizational structure. While the Lebanese

context with its nationally mandated curriculum has allocated limited responsibilities to instructional supervisors when it comes to the curriculum, the nature and the demands for managing the implementation of the international programs have broadened the scope of the role, albeit partially, in this respect.

Challenges Faced by Middle Leaders

Analysis of the participants' responses shows that middle leaders performing instructional supervisory functions in the selected school faced two types of challenges. First, are the challenges that were reported by the participants of this study, and that also appeared in the reviewed international literature, hence revealing obstacles related to the nature of the instructional supervisory role, and functions. Second, are the challenges that are shared between the participants of this study and other participants within the Lebanese context, and these can be attributed to the cultural and organizational contexts of the school under study.

The participants' perception of the challenges they faced when they transitioned into their role as middle leaders, converges with some of the challenging factors described in the reviewed literature. These include ill-defined expectations of the role in the school context, lack or insufficient preparation for the functions, time factor, and the school size. However, the findings of the study diverge from the Western literature in other aspects that seem to be specific to the cultural context, namely the limited scope of authority of the middle leaders, the lack of trust between some teachers and middle leaders, and a school structure that does not favor collegiality.

Challenges Related to the Nature of the Role

Data analysis shows that the middle leaders in this school faced the following challenges: (1) lack of a shared understanding for their role, (2) insufficient preparation,

(3) insufficient time allocated for their position, and (4) a complex school structure. These challenges seem to transcend organizational and cultural contexts and are shared with other role occupants suggesting that they emanate from the middle leaders' role.

Middle leaders participating in this study advanced that the lack of a shared understanding of their role as curriculum leaders was the main challenge that hindered their functions. The participants' responses reveal three aspects of this role-related challenge: limited buy-in from the directors, role conflict with other middle leaders, and teachers' resistance. The participants agree with their international counterparts on the challenges related to the lack of understanding of their role, especially at the level of the other middle leaders in the school. Irvine and Brundrett (2016) confirm the hindering effect of ill-defined school expectations regarding the role of leaders at the middle tier. Similarly, Sergiovanni and Starratt (2007) argue that middle leaders face difficulties in performing their functions at the early stages of their appointment when their functions are not well defined. The ambiguity of instructional leaders' role was also mentioned in some of the reviewed studies in the Lebanese context. According to Chmeissani (2013), the profile of responsibilities of instructional supervisors in Lebanese schools mainly depends on the way instructional supervision is viewed.

Another challenging factor mentioned in the international literature was insufficient preparation of the middle leaders for their functions (El Murr, 2015; Gurr & Drysdale, 2013). Lack of formal preparation for the functions of the role was also reported by the majority of the participants in this study. The areas identified by the participants as insufficiently mastered included knowledge of all the programs offered at the school, leading and managing change, and familiarity with policies and procedures. The participants in this study reported that it took a lot of on-the-job

learning to know about the content and pedagogical approach in each program, and to become more familiar with the procedures followed at each cycle-school. The reviewed literature confirms the hindering effect of insufficient preparation of middle leaders. According to Javadi et al. (2017), a lack of formal preparation restricts the role that middle leaders can play in school improvement. All the identified areas overlap with the recommendations of the reviewed Western literature (De Nobile, 2018; Ng &Kenneth-Chan, 2014; Sergiovanni & Starrat, 2007), which also confirms that when relevant professional development is not provided, middle leaders are left alone to learn on the job (Gurr & Drysdale, 2013). Providing the training needed for school leaders to become more proficient in their different responsibilities was also a common recommendation for the reviewed Lebanese studies (Chmeissani, 2013; Ghamrawi, 2013; Jureidini, 2018).

The analyzed data also revealed two contextual factors that hindered middle leaders from adequately performing their function. The participants identified insufficient time allocated for their position, and the complexity of the school structure as hindering factors. Similar challenges were reported in the reviewed international literature where the researchers identified the size of the school and the time given to the middle leaders to perform the tasks as two of the factors that can impact their functions (Drago-Severson, 2004; Javadi et al., 2017). Research conducted in other Lebanese schools also confirms the hindering effect of these two contextual factors identified in Western literature (Chmeissany, 2013; Jureidini, 2018).

The alignment with international literature regarding the four challenges identified by the participants, seems to be related to the conception of the middle leaders' role within the hierarchy of a school regardless of the cultural context. Creating

a middle layer of leaders within the organizational structure of a school will not be well received unless senior leaders believe in and practice distributed leadership. These role-related challenges also seem to emanate from the ill-defined role expectations. Clear role expectations will not only reduce resistance to the role, but they also help determine the professional development needs of practitioners as well as the time to be allocated for performing the role functions considering the size and the complexity of the school structure.

Challenges Unique to the Lebanese Context

Despite the alignment of the four challenges reported by the participants with the international literature, some aspects of these challenges remain unique to the Lebanese context. The unique aspects included the limited scope of authority of the middle leaders, the lack of trust between some teachers and middle leaders, and a school structure that does not favor collegiality.

When describing the challenges related to the lack of a shared understanding of their role, the participants argued that the limited scope of the authority and responsibility allocated to middle leaders was accentuated by the poor understanding of their role by the directors. Considering the school structure where each cycle-school is headed by a director with almost full authority over academic decisions in her/his school, these directors perceived the newly introduced middle leaders' role as interfering with the decision-making process in their schools. Studies in other Lebanese schools also consider the lack of support from the school administration as a major obstacle faced by instructional supervisors. The study by Chmeissani (2013) recommends that instructional supervisors be supported by the administration and be granted more authority to contribute to school-level decisions that can impact the

instructional process. This aspect of the challenge seems to be unique to the Lebanese context as it was not found in Western literature. This indicates a possible relation with the authoritarianism of leadership roles in the Lebanese context, which is often translated in expectations of conforming with the directors rather than finding means for coordination and collaboration as well as for participation in decision-making.

The study findings pointed at two other challenges that seem to be unique to the Lebanese context as they were only reported in research on middle leaders in this context. Lack of trust and collegiality were reported by the participants when they talked about teachers' resistance and role conflict with other middle leaders. These challenges align with the results of some studies conducted in the Lebanese context asserting that the lack of trust between the instructional supervisor and teachers, and a school culture that does not favor collegiality at the workplace can hinder the supervisory functions of school leaders (Chmeissany, 2013; Jureidini, 2018). In the school under study, the competent and experienced teachers that this school typically attracts, perceive their professional developmental level equal to that of the middle leaders acting as their support-person. Therefore, without a culture of collegiality this has become a source of conflict and tension.

Organizational Support for the Middle Leaders

The participants in this study shared what they perceived as existing forms of organizational support, namely their clear job description, the support of senior leaders, and their regular meetings. They also suggested some other factors such as formal preparation and more buy-in from the directors for their role as enablers to better perform their functions. Some of these forms of support agree with the recommendations of the reviewed literature, namely buy-in from other school leaders,

and formal preparation. On the other hand, the remaining factors seem to be unique to the school context.

Factors Aligned with the Literature

Further comparative examination of the results reveals that some of the identified enabling organizational factors to instructional supervisors are shared across cultures as reported in the reviewed literature. This included support provided by school administration and formal preparation.

Perceiving buy-in from the senior leaders as a supporting factor for middle leaders and suggesting further support from the directors of the different cycle-schools, was an area of agreement between the literature and the results of this study. According to De Nobile (2018), principals' support is one of the contextual factors that can help middle leaders successfully perform their functions. Similarly, Javadi et al. (2017) argue that the quality of relationship with the school principal can favor or disfavor decision-making at the level of the middle tier, which makes it a key factor affecting the role of middle leaders. Studies conducted in the Lebanese context confirm that middle leaders can effectively enact their instructional supervisory role when they are supported by the school administration (Chmeissani, 2013; El Murr, 2015). Data analysis shows that although the middle leaders in this school were supported by the school president and vice-president who believe in the added value of their role, they still needed additional buy-in from the cycle-school directors as a necessary source of organizational support. As compared to their counterparts in the West, Middle leaders in the Lebanese context receive limited buy-in and support from the senior leaders in the school. This may be due to the hierarchical structure and the lack of collaboration dominating the

organizational culture. It may also be related to whether or not senior leaders realize the added value of the role enacted by the middle leaders in school improvement.

Another supporting factor suggested by the participants that aligns with the recommendations of international research was formal preparation for novice middle leaders. The reviewed literature asserts that adequate training is essential to enhance the ability of middle leaders to enact their role and to effectively perform their instructional supervisory functions as determined by the school context (Ghamrawi, 2013; Gurr & Drysdale, 2013; Irvine & Brundrett, 2016; Jureidini, 2018). This result points to the need to acknowledge the complexity of the functions of instructional supervisors and their technical nature and asserts that a shift is still needed whereby sufficient preparation is both mandated and also achieved. While there is alignment in pointing at the importance of this factor with the international literature, the scarcity of programs that can provide such training in the Lebanese context suggests that it is a harder condition to achieve as it demands a lot of changes to take place at the policy-making level and in universities as well.

Factors Unique to the School Context

Two forms of organizational support described by the participants were unique to the cultural and organizational contexts. On one hand, considering the job description that reflects some of the participants' recommendations as a supporting factor seems to be unique to the school under study. On the other hand, the participants' awareness of the importance of collaboration although it was not practiced at all levels in the school, is aligned with the research findings in the Lebanese context.

Middle leaders participating in this study perceived their job description as a supporting factor that helped them understand their role expectations and that clearly

defines their functions. They also noted that the job description became more relevant to their role after it was revised to reflect some of their recommended modifications to better address the needs of the school. Although the reviewed literature addressed various aspects related to middle leadership including the role expectations, there was no mention of characterizing just having a job description of middle leaders as a supporting factor. The necessity to revise the job description at least twice in two years, and to have the input of the position holders in their job description points that the school administration did not clearly define the role expectations before creating the new position, especially that other middle leaders also perform somehow similar instructional supervisory functions at the level of the cycle-schools. Unlike the situation in many Lebanese schools, having a written job description that clearly describes the responsibilities of middle leaders is required by the international agencies by which the school is accredited. This created an incentive for the school administration to ensure that this document is prepared, refined, and implemented.

In addition, the participants identified the regular meetings of the selected group of middle leaders as a source of support. They perceived these meetings as a forum where they shared the progress of their tasks, the challenges they faced and how they supported each other. However, none of the participants described an institutionalized process to enhance systematic collaboration with other middle leaders in the school or even with the cycle-school directors. The awareness of the participants in this study to the need for professional collaboration among middle leaders, resonates with research conducted in other Lebanese schools noting the absence of this collaboration as detrimental. Studies conducted in the Lebanese context confirm that schools are still shaped by a hierarchical and authoritarian system and that the change towards a more

collaborative system has not yet happened in this cultural context (Karami-Akkary, 2014). In fact, the reviewed studies on instructional supervision in the Lebanese context point to this deficit and recommend that schools provide enough time for collaboration among middle leaders, and between middle leaders and other stakeholders (Chmeissani, 2013; Ghamrawi, 2013; Jureidini, 2018).

While collaborative organizational cultures are scarce in Lebanese schools, the fact that there was awareness among the participants of its importance is promising as it sets the stage for integrating collaborative practices in the school while reducing resistance. Something that will facilitate the implementation of the instructional supervisors' role as community builders.

Preparing Middle Leaders

Middle leaders participating in this study agreed that novices need to be prepared before assuming their role. They confirmed that they were "thrown into the role" without getting any training on their functions and that they had to self-learn some of their tasks. Data analysis revealed that middle leaders participating in this study were aware of their professional development needs. However, they struggled to offer suggestions on the design characteristics of an induction program that can help them meet the identified needs. The participants' responses partially addressed two of these characteristics, namely the content and the approach. The participants failed to share practices that can be used as part of the induction program. This is not surprising in an organizational context where pre-service training for instructional supervisors is not yet established, and where schools mostly depend on the existing set of skills of those newly appointed to the job. Induction services are often absent in the Lebanese context

(Hashem, 2013), hence, like their Lebanese counterparts, most of the study participants have not been exposed to any of these preparatory practices.

On the other hand, the international literature is ripe with recommendations and design characteristics for the effective preparation of instructional leaders (Drago-Severson, 2011; Ng & Kenneth-Chan, 2014; Zepeda et al., 2014). The reviewed literature on middle leadership recommends on-going training, and professional development programs intended to build instructional leaders' capacity while taking into consideration their professional needs as determined by their functions in the school context (Ng & Kenneth-Chan, 2014; Thorpe & Bennet-Powell, 2014). Similarly, Chmeissani (2013) argues for providing the basic pre-service and in-service training needed for Lebanese instructional leaders to become more proficient in their different responsibilities. The call for preparing middle leaders was a common recommendation to all the reviewed studies; however, the lack of professional development programs for instructional leaders was a bigger concern in the Lebanese context (El Murr, 2015; Hashem, 2013).

The sections below will highlight the aspects unique to the context related to each of the characteristics of the proposed induction program.

Competencies and Skills

The participants all agreed that middle leaders performing instructional supervisory functions, lack formal training on some of their responsibilities in the school under study. Analyzing the participants' responses revealed two categories of topics that determine the content of the proposed in-service program: topics related to supervisory functions, and topics addressing building interpersonal skills. Preparing middle leaders for their functions was also mentioned in the international literature on

in-service professional development that emphasizes induction as a recommended type of training for practicing professionals (De Nobile, 2018; Glickman et al., 2010). The reviewed studies recommend that professional development programs address the needs of middle leaders (Guskey & Yoon, 2009; Thrope & Bennet-Powell, 2014) to support them in performing their functions (Glickman et al. 2010), while taking into consideration the school setting and the needs of the system (Zepeda et al., 2014). Similarly, Chmeissani (2013) recommends training leaders on all the six responsibilities of the proposed profile for instructional supervisors in Lebanese schools. Mattar (2012) proposes on-the-job training for school leaders in two major areas: curriculum and leadership.

The participants suggested topics including curriculum development and strategies to support teachers. They also proposed training on interpersonal skills, namely communication, emotional intelligence, and maintaining positive interpersonal relations. The literature confirms the importance of these topics in preparing middle leaders for their instructional supervisory functions. According to De Nobile (2018), middle leaders must be trained to use a combination of strategies including managing relationships, communicating effectively, and managing time to carry out the tasks associated with their functions. Studies conducted in the Arab context including some Lebanese schools confirm that middle leaders must further develop their knowledge and skills in all the areas identified by researchers in the West (Al Kiyumi & Hammmad, 2020; Ghamrawi, 2013, Jureidini, 2018). Interestingly, the participants suggested other function-related topics that seem to be unique to the school context since they were not mentioned in the reviewed literature; namely, orientation to the multiple programs

taught at the school, how to become trainers, and how to adapt school initiatives to their subject area.

On the other hand, the literature revealed other topics recommended for inclusion in the training programs for middle leaders, that the participants failed to mention such as leading teams (De Nobile, 2018), leading change (Irvine & Brundrett 2016), and promoting collegiality (Chmeissani, 2013). Most of the topics suggested by the participants focus on the technical responsibilities identified by the reviewed instructional supervisory models (Chmeissani, 2013; Glickman et al. 2010). On the other hand, the topics found in the literature and that were not mentioned by the participants converge with the cultural responsibilities in these models. This is expected in a culture where the role of school leaders is more associated with managerial tasks, curriculum, and instruction than with enhancing collaboration and building learning communities.

Approach to be Adopted

Data analysis reveals three characteristics for the approach to be adopted when implementing the proposed induction program. The participants suggested an approach that accommodates on-going training, encourages mentoring, caters to the emerging needs of the targeted middle leaders. These suggestions resonate with the reviewed literature on in-service professional development reports on the design of effective training programs. According to Zepeda et al. (2014), effective training programs must follow an approach that is aligned with how adults learn. Consequently, in-service training should not only focus on the content relevant to practitioners, but also on the appropriate process to conduct this training (Drago-Severson, 2004). According to Ng and Kenneth-Chan, (2014), professional development programs must provide

instructional supervisors with opportunities to adapt theories related to teaching and learning to classroom activities, and further develop their interpersonal skills. Similarly, the results of the study by Al-Kiyumi and Hammad (2020) prove that training instructional supervisors must combine theoretical and practical knowledge.

Middle leaders participating in this study reported the need for on-going training that starts at the beginning of the academic year, and ensures regular follow-up during implementation, which was also recommended in the reviewed literature. According to Achille and Romey (1990) practitioners need continuous support to adequately perform their new functions, and this is often ensured through in-service preparation programs. Western research on professional development found that sustaining professional growth necessitates creating on-going opportunities for authentic learning (Drago-Severson, 2011), and adequate time for structured follow-up after training (Guskey & Yoon, 2009).

Coaching novices by more experienced middle leaders and supporting on-the-job learning through allowing flexibility in the implementation plan of the in-service training were two other suggestions for the approach of the proposed induction program. The reviewed literature describes instructional supervision as "highly contextualized"; thus, peer coaching is recommended to support school leaders during their in-service preparation programs (Lochmiller, 2014). Moreover, on-going evaluation and feedback during on-the-job training are recognized by scholars as one of the characteristics of successful preparation programs (Glickman et al., 2021). Arab studies including those conducted in the Lebanese context confirm that effective professional development needs to be planned and continuous (El Murr, 2015),

addresses the needs of practitioners (Chmeissani, 2013), and encourages professional collaboration among peers (Al-Kiyumi & Hammad, 2020; Jureidini, 2018).

Practices and Strategies to be Used

When asked about their perception of the design characteristics for an effective preparation program, the participants failed to share practices to be adopted for the proposed program. By practices it is meant the various strategies used to deliver the content and that are in-line with the suitable approach to implement the induction program. Failing to come up with practices for the program may be related to the way professional development is managed at this school. Middle leaders as well as other stakeholders, are usually offered "one size fits all" workshops that are recommended by the senior administration to meet the school needs rather than the practitioners' needs. Middle leaders might have their input regarding the topics they need to be trained on; however, they can rarely decide on the delivery mode for their training sessions.

Since the participants were unable to come up with best practices for the proposed induction program, the researcher referred to the literature on effective professional development to identify some relevant practices. To prepare middle leaders for their instructional supervisory functions in the context of their schools, the reviewed studies recommend practices that involve peer coaching (Lochmiller, 2014; Zepeda, 2015), and that use action research (Al kiyumi & Hammad, 2020; Drago-Severson, 2011) as a means to encourage collaboration within professional learning communities (Al kiyumi & Hammad, 2020; Sergiovanni & Starrat, 2007; Zepeda, 2015). Thorpe and Bennet-Powell (2014) assert that middle leaders do not benefit from "one size fits all" training programs, because the professional needs of the leaders depend on their functions, and the school context. Instead, they can benefit from in-service training that

is specially designed to address their needs as practicing professionals and that uses delivery methods aligned with the principles of adult learning (Guskey & Yoon, 2009; Irvene & Brunderrett, 2016; Zepeda, 2015).

Design Characteristics of the Induction Program

The design characteristics for the proposed induction program were deduced from the study results and the reviewed literature on effective professional development. These design characteristics can be summarized as follows.

First, the content must cover competencies and skills that can support the targeted middle leaders in performing their supervisory functions. The competencies include curriculum development, strategies to support teachers, orientation to the multiple programs taught at the school, how to become trainers, how to adapt school initiatives to their subject area, leading change, whereas the skills mainly target interpersonal skills, such as communication, emotional intelligence, maintaining positive interpersonal relations, and promoting collegiality.

The suggested program must also take into consideration the way adults learn by adopting an approach that accommodates on-going training, encourages mentoring by more experienced middle leaders, promotes professional collaboration among peers, and makes use of the trainees' feedback to cater for their emerging needs.

Finally, this induction program must adopt practices and strategies that are in-line with the approach. The reviewed studies recommend peer coaching as a strategy to mentor novice practitioners and action research as a means to encourage professional collaboration.

Conclusion

The reviewed literature revealed that the knowledge base on middle leadership is undertheorized in the West, and almost inexistent in the Lebanese context, except for the few studies conducted in some Lebanese schools and that explored instructional supervision, a role mainly assigned to middle leaders. Because of the shortage of knowledge on middle leadership, despite the important role they can play in school improvement, the first purpose of this study was to explore the functions, the challenges and the supporting factors affecting the role of a group of middle leaders performing instructional supervisory functions in a private Lebanese school. The second purpose of the study was to explore the professional development needs of these middle leaders to develop a plan for an induction program that aims to prepare them for their functions in this school.

In this first part of the conclusion, the researcher will present what these findings added to the current knowledge base on middle leadership. In the second part of the conclusion the researcher will highlight the understanding that lay the foundation for developing a plan for an induction program aiming to prepare novice middle leaders for their role and their instructional supervisory functions in this school.

Contextualized View of the Role of the Middle Leaders

Most of the findings on the role of middle leaders performing instructional supervisory functions in this school transcend the cultural context and confirm what was found in the literature on middle leadership. Like their international counterparts, the participants described their role as pedagogical leaders, resource-person for teachers, and implementors of change. They also agreed with their international counterparts, on

the complexity of their role and that it was created to meet specific needs in the school context.

However, the study results reveal an aspect of the role that is shaped by the local context pointing that claims on reaching a universal definition of the role functions of middle leaders cannot be supported yet. Unique organizational and contextual conditions determine what and how key functions of the role are experienced and performed, what gets to be emphasized and what type of challenges are faced. Most importantly, and as expected the study findings helped the researcher to develop an understanding of the challenges emanating from the unique demands of the school serving multiple curricula and trying to coordinate its divisions through the middle leadership role to maintain organizational coherence. This understanding is essential to build on as she proceeds to achieve the second purpose of the study that of designing an induction program,

The fact that the school offers multiple curricula, and the position of the middle leaders who participated in the study was newly introduced emerge as a strong determining factor that shaped the views of the study participants. In fact, it has impacted what they emphasized in term of their role functions as well as the challenges they faced once assigned to the role. Behind the general alignment of the participants views with the international literature resides a unique canvas of the organizational context of the school where they have to perform their role.

First, the way middle leaders in the school under study perceive their instructional supervisory functions, lies somewhere between what was found in the Western literature and what the studies conducted in the Lebanese context revealed. One possible reason is that the middle leaders participating in this study have exposure

to how instructional supervision is perceived in the West, and a wider scope of responsibilities compared to their Lebanese counterparts. Thus, it comes as no surprise that the curriculum-related function was consistently highlighted whether in their responses on the role responsibilities or the challenges they faced. This supervisory function included curriculum development, implementation, and evaluation. While overseeing curriculum implementation, took most of the participants' time, which is in line with what is typically found in Lebanese schools where the curriculum is nationally mandated (Chmeissani, 2013), the scope of responsibility related to curriculum development and evaluation, extends beyond implementation and is more aligned with the demands of the Western programs that the school is committed to implement. Interestingly, and despite the clear focus on their curriculum supervision functions, the participants insisted on the importance of their role in providing support for teachers through assessing their needs, including those related to the instructional strategies needed to implement the curriculum, and providing training to meet these needs. This emphasis aligns more with Western models of supervision than with the perception of this function in the Lebanese context (Chmeissani, 2013; Glickman et al., 2010; Pawlas & Oliva, 2008). However, because of the absence of an institutionalized professional development process that middle leaders can refer to while supporting teachers, this function does not mirror all the characteristics of formative evaluation as described in the Western literature.

Second, the findings revealed that the role of the middle leaders is contrived by a decision-making process that is still authoritative especially when it comes to introducing new practices at the school. From the participants' responses, it became clear that the introduction of the position of the middle leaders was made without any

consultations with those who were brought to fill these newly introduced positions. Rather the decision was top-down in response to the challenge of managing the multiple programs and came without sufficient planning for implementing this top-down change. When the participants described their role, they viewed themselves as pure implementors of that mandated change, neglecting that they can also play an active role in the initiation of this change. Such limited scope of their role as potential agents of change in their school resonates with the reported authoritative approach that still dominates Lebanese schools (Karami-Akkary, 2014). The type of challenges identified by the middle leaders when they transitioned into their new role, reflected the authoritative decisions leading to the institution of their role. These resulted in a lack of a shared understanding for their role, the limited authority of the middle leaders, the lack of trust between some teachers and the middle leaders, and a school structure that does not favor collegiality.

Moreover, the participants missed mentioning certain areas to be included in their training and that are important for their functions such as leading change, collaboration, and collegiality to avoid resistance. This is probably related to how the role of middle leaders itself is still perceived in the Lebanese context where the role-functions still involve more managerial tasks than leadership tasks (Chmeissani, 2013; El Murr, 2015; Jureidini, 2018).

Lastly, middle leaders participating in this study had a clear understanding of the assets their school organizational arrangements offered that helped them overcome some of their challenges. These included a refined job description based on their feedback, and the ability to hold coordination meetings. Despite this awareness of the added value of professional collaboration among middle leaders, the participants did not

suggest that the school introduces a plan to further improve collaboration among stakeholders at different levels of the hierarchy, and to create a more collegial school culture as often advanced with what the literature consider to be supporting factors for middle leaders (De Nobile, 2018; Irvene & Brunderret, 2016; Jureidini, 2108). This further emphasizes the unique organizational context for the study participants whereby solutions for obstacles gravitate towards what individuals can do rather than towards critically assessing the existing organizational arrangements.

Foundations for the Induction Program

In this second part of the conclusion, the researcher will highlight the understanding that lays the foundation for developing a plan for an induction program aiming to prepare novice middle leaders for their role and their instructional supervisory functions in this school. While the participants realize the importance of a formal preparation for middle leaders, a lot of probing was needed to help them share their views about the design characteristics of an induction program that aims to prepare novice middle leaders for their instructional supervisory functions in this school. The topics suggested for the preparation program and the proposed approach to cover its content agree with what was found in the literature on effective training programs (Al Kiyumi & Hammad, 2020; Drago-Severson, 2011; Zepeda, 2015). The participants proposed training novice middle leaders on the identified functions, as well as on the skills to successfully perform these functions. The content of the preparation program as proposed by the participants addressed some of the technical and cultural responsibilities presented in the conceptual models by Glickman et al. (2010) and by Chmeissani (2013). Furthermore, the participants' suggestions for the best approach to

implement the proposed induction program, resonate with what was found in the literature on effective training programs.

These findings highlight a certain level of readiness of the participants to be engaged in the design of the induction program beyond voicing their individual needs. Most of what they shared seems to be validated by what is acknowledged in the literature as best practices and reflects their awareness of their school's unique organizational demands. The composite of what the participants shared in terms of the priorities of their role, the challenges they are facing, and the assets that their school offered them, constituted a solid foundation for the researcher to build her proposed induction program on. However, the participants' failure to elaborate further on the practices to be included in the induction program reflects their limited views on the potential modalities that can be included in this program. Failing to share practices that best deliver the content of the proposed induction program, indicates that middle leaders have been heavily socialized in a "one-size fit all" type of training. Moreover, their emphasis on setting demanding selection criteria of middle leaders reflects their limited expectation for the school to support individual growth of middle leaders after they assume their functions. In Lebanon educational policies and school bylaws do not yet mandate pre-service training for leaders with instructional supervisory functions. A "self-made" view of the middle leaders still dominates. Hence, the importance of designing induction programs for middle leaders as a mean of institutionalizing their professional development and changing the professional norms pertaining to preparing middle leaders, making it a shared responsibility between the role occupants, and the school upper administration rather than solely that of the former.

On the other hand, the Lebanese context does not offer a vision of the instructional supervisors' role that is comprehensive enough to respond to the needs of the school with its multi-curriculum offerings. The best strategy to meet the professional development needs of middle leaders is one that institutes an induction program that (1) orients the novices into the unique requirements of the school both in term of its structure as well as the fact that it has multiple programs, and (2) addresses the basic competences and skills needed to perform the key supervisory functions needed in this school.

Recommendation for Practice: Plan for an Induction Program

The findings from this study prove that most of the challenges faced by middle leaders in this school could have been alleviated through a need-based induction program that prepares them for their instructional supervisory functions in the unique organizational context of their school. Induction is often selected as a means for in-service preparation of novice practitioners to facilitate their transition into the new roles (Gerreval, 2018; Lochmiller, 2014). The proposed program extends over two years to provide sufficient support for the novice middle leaders to enable them to perform the role expectations independently. The proposed plan for the induction program is guided by the framework for effective professional development as described by Glickman et al. (2010) in that it covers three stages: orientation, integration, and refinement. The program was informed by the study results related to the challenges faced by the targeted middle leaders/subject experts and their professional development needs. These helped identify the learning outcomes, the competencies, and skills to be addressed in the program to meet these needs. The plan for the program was developed in-line with Wiggins and McTighe's (2005) UbD-model and includes the learning outcomes,

relevant competences and skill to be targeted and the strategies needed to meet these outcomes. The researcher was also guided by the principles of adult learning (Zepeda, 2015) when selecting the strategies to cover the proposed content. The induction program will provide training on the following topics: organizational structure, school policies and procedures, role expectations, communication channels in each cycle-school and among these cycles, curriculum development and evaluation, supporting teachers, interpersonal skills, and promoting collegiality.

Plan for the Proposed Induction Program

This section provides a description of the plan for the proposed induction program including the learning outcomes, as well as the time frame, the targeted competencies and skills, and the proposed strategies for each of the stages of the induction program. It also presents methods to monitor the induction process during the different stages and guidelines for evaluating the whole program.

Program Learning Outcomes

After completing this two-years program, the targeted middle leaders, who are the novice subject experts, are expected to show evidence of the following outcomes:

1. Develop an understanding of the school organizational structure and the role of the subject experts in this school, as well as of the coordination channels especially with those performing instructional supervisory functions.
2. Develop an understanding of the curricular requirements set by the different programs adopted by the school.
3. Apply theories related to curriculum design to develop parts of a curriculum (units or lessons), and a full curriculum, and also to be able to oversee this task when performed by other stakeholders.

4. Design a plan for evaluating curricula based on the school vision and students' needs.
5. Design a plan for supporting teachers based on their needs while accommodating school-wide initiatives and aligning the forms of support to the organizational professional development plan.
6. Develop an understanding of the uses of action research as a process for continuous learning, and as a strategy to initiate change while enhancing professional collaboration.
7. Apply techniques to improve interpersonal skills such as communication, emotional intelligence, and promoting collegiality.
8. Apply change management techniques to sustain a shared vision and minimize resistance to new initiatives.

Orientation Stage

During this stage the inductees receive basic knowledge and skills that they can use when they start performing their functions (Glickman et al., 2010). Since most of the middle leaders, including the subject experts, are appointed from within, orientation in this context mainly covers policies related to the role and the procedures followed in each cycle-school and how they relate to the supervisory functions of the middle leaders' role.

Assigning a mentor to each novice subject expert is essential at this stage since she/he can provide the inductee with emotional support, in addition to the professional support (Lochmiller, 2014). In fact, according to the participants' responses, most of the challenges they pointed at in this study were alleviated by the support of an unofficial mentor. Mentors are usually selected among qualified and experienced leaders who

have the knowledge and skills to support the novices, both professionally and emotionally.

Time Frame. The orientation stage will take place during the induction week at the beginning of the first year of implementation.

Competences and Skills. During this stage of the induction program, the following competences and skills will be targeted:

- Develop a common understanding of the organizational arrangements related to all instructional supervisory functions and to the coordination channels among them.
- Develop a common understanding of the role expectations by referring to their job description to clarify the different role-functions.
- Develop a common understanding of what is considered as effective teaching.
- Become familiar with the multiple programs adopted by the school including the scope and sequence, the pedagogical approach, and the assessment strategies.
- Develop a better understanding of the student profile and how the multiple programs contribute to this profile.
- Develop a better understanding of the regulations and procedures applied at each cycle-school.
- Collaborate with the appointed mentors and start performing the supervisory functions while being supported by more experienced middle leaders acting as their mentors.

Recommended Strategies. The following strategies are recommended to help the novice subject experts develop the competences and skills targeted in the orientation stage:

- General presentation by the vice-president for academics, the HR director and the ERC director to introduce the school organizational arrangements, coordination channels, the role expectations and the mentoring program. During this session, mentors-mentees will be paired, and the mentoring program will be shared with the participants including a calendar for the regular meetings during the year and a general framework explaining the responsibilities of mentors and mentees.
- General presentation by the vice-president for academics, and the ERC director to share how the student profile reflects the school vision, and how the multiple programs offered by the school are in line with the student profile. During this session, the presenters will also share the general school expectations in term what is considered effective teaching.
- General presentation by the cycle-school directors to introduce their teams to the novice subject experts, and to clarify the procedures and regulations in their schools as well as the recommended communication channels that the subject experts can follow to collaborate with the team in each school.
- A workshop offered by the heads of programs (Lebanese, CPP, French program) and IB coordinators (IB-PYP, and IB-DP), assisted by the EdTech coordinators, to share the main requirements of each program and to introduce the digital platform hosting each of the different curricula. Following the introduction by the heads of programs and the demonstration

by the EdTech coordinators, novice subject experts will team with their mentors to navigate each platform and get familiarized with the type of information hosted on these platforms, how to edit the currently uploaded curricula, and how to generate reports. During this workshop, the presenters (Heads of programs and IB-coordinators), the mentors, and the novice subject experts will agree on a schedule for their collaborative meetings.

Integration Stage

During this stage novices start applying the newly acquired knowledge and skills (Glickman et al. 2010). The on-going support needed during this stage, is usually provided through mentoring (Lochmiller, 2014). Mentors will collaborate closely with the novice subject experts to support them as they perform their functions. Mentors' coaching role will gradually decrease during this stage until it totally fades once the novices become ready to perform their functions independently. During the integration stage, the inductees will be trained on their curriculum related functions, how to support teachers, and how to lead change.

Time Frame. This stage will extend at least over the first year of implementation. The different sessions will be scheduled during the reserved in-service days- the school runs three in-service days per year- or on in lieu of faculty meetings - the school reserves one Wednesday afternoon per month for professional development and for faculty meetings. Some competences and skills may also be revisited and addressed at a higher developmental level during the second year of implementation.

Competences and Skills Related to Curriculum Development and Evaluation. During this stage of the induction program, the following competences and skills related to curriculum development and implementation will be targeted:

- Apply theories related to curriculum design and abide by the curriculum format adopted by the school and the mentors' guidelines to develop new lessons and units when needed.
- Develop a scope and sequence showing the progression of the topics covered in each program over the different cycles, and how to use this scope and sequence to ensure vertical articulation for each curriculum.
- Collaborate with other middle leaders and with the teachers to oversee the development of new curricula
- Evaluate curricula to ensure that the content and activities are age appropriate, the pedagogical approach reflects both the school mission statement as well as the standards set by the national and international agencies that develop the different programs, and that the assessment strategies are aligned with these standards.

Competence and Skills Related to Supporting Teachers. During this stage, novice subject experts are also expected to develop competences and skills related to supporting teachers. What follows are the competences and skills to be targeted:

- Use the "Danielson Framework for Teaching Evaluation Instrument" while conducting class visits to identify the teachers' professional needs. Since the framework is adopted by the school, this workshop is needed to help the inductee develop a common vision with the rest of the instructional leaders in this school.
- Collaborate with the mentors and the ERC team to set a plan, on how to use the evidences collected during classroom visits and that are based on the four domains of the Danielson framework to support teachers and address their

needs. This plan will later be revised and approved by the school administration, as a step towards institutionalizing formative evaluation of teachers.

- Design and run training sessions addressing the needs of groups of teachers and that are targeted to introduce a change at one of the school-cycles, or even school-level change initiatives.

Competences and Skills Related to Leading Change. Training provided during the integration stage will also target building the capacity of the novice subject experts on leading change. What follows are the competences and skills related to this function:

- Identify areas that are perceived as pressing needs and that can contribute to school improvement using data collected from surveys, observations, and feedback from different stakeholders.
- Refer to the action research framework, to collaborate with other stakeholders in setting clear goals for improvement, and in planning for and evaluating change.
- Develop team-building skills including trust building, coordination strategies, time management, and how to run productive meetings.
- Develop interpersonal skills, mainly those related to the affective domains and emotional intelligence. These skills include how to communicate with different stakeholders while taking into consideration the cultural and the organizational context, how to maintain positive interpersonal relations, and how to avoid resistance.

Recommended Strategies. The following strategies are recommended to help the novice subject experts develop the competences and skills needed for the integration stage:

- A workshop offered by the international providers of the Learning Management Systems where the school curricula are hosted to explain the template adopted by the school as well as the technical aspects of this digital template.
- Study groups where mentors, mentees and other middle leaders can explore the different theories related to curriculum development, select practices that are relevant to the school context, and generate a framework that guides the tasks related to this function. Joining study groups is a form of active learning that encourages collaboration among practitioners.
- Collaborative meetings with the mentors to co-develop lesson plans and then a complete unit based on the school template. During these meetings, mentors assist novice subject experts in carrying out these tasks, observe them while performing the tasks. and provide feedback.
- A workshop offered by the VP for academics assisted by the heads of programs (Lebanese, CPP, French program) and IB coordinators (IB-PYP, and IB-DP), to share the major criteria for evaluating the different curricula. This includes sharing resources to help the novices access the updates for each program when published by the local and international organizations that set these programs. The workshop should also address means to reflect school-wide initiatives into the curricula. As well as requirement of each program.

- Workshop by the Danielson Group to train novice subject experts on how to use the “Danielson Framework for Teaching Evaluation Instrument” to observe teachers and to take evidence-based decisions regarding the strategies that can best support teachers.
- Training by school counselors and the head of the school climate on interpersonal skills and how to use these skills to avoid resistance to change. This training needs to be contextualized by addressing some case-studies that subject experts might face when performing their functions.
- Training on team building by a workshop provider, that is recommended by the ERC. This training will introduce the novice subject experts to coordination strategies and means for building trust among members of a team. It will also support the inductees on how to manage time and how to run productive meetings.
- Collaborative session with the mentors and the ERC team on setting a plan to support teachers and to institutionalize formative assessment. Novice subject experts and their mentors should form a team of professionals who engage in collaborative work together and with other stakeholders, to improve and formalize some of the school procedures.
- Training on the different competences and skills needed for leading school improvement including collecting data to identify the needs and taking evidence-based decisions to prioritize these needs, collaborate with other stakeholders in setting clear goals for improvement that align with the school vision and that earn the buy in from all, and also in developing an implementation plan and strategies to monitor and evaluate the change

initiatives. (The TAMAM School Improvement Cycle is a good reference at this stage)

- Training on action research to create a professional learning team with teachers and other middle leaders and to generate new knowledge related to school improvement and leading change. When using action research, professional teams will rely more on self-learning instead of becoming dependent on workshops offered by trainers from the school or from outside the school to build their knowledge. During this training session, novice subject experts will learn how to investigate practice-related problems, how to explore strategies to solve these problems, and how to implement new practices and monitor the implementation of these practices.

Refinement Stage

During this stage, inductees are functioning at a higher developmental level for they are able to reflect on their responsibilities and improve their practices (Glickman et al., 2010). This is the stage where they can also give their feedback to the senior leaders on how to improve the role-functions in order to sustain school improvement.

Time Frame. The refinement stage is planned for the third trimester during the second year of implementation. The readiness of the novices will determine when exactly they can provide their input; however, the different sessions can be scheduled during the in-service days.

Targeted Competences and Skills. The following competences and skills will be targeted during the refinement stage**:**

- Revise the current procedures for developing and evaluating curricula in order to formalize and improve the curriculum related procedures followed in the school.
- Revise the current procedures for supporting teachers and contribute to the institutionalization of formative evaluation in the school.
- Propose strategies to improve collaboration and to promote collegiality in the school

Recommended Strategies. The following strategies are recommended to help the novice subject experts develop the competences and skills needed for the refinement stage:

- Training by a workshop provider recommended by the ERC, on how to set personal goals, how to do self-reflection aiming to improve performance, and how to evaluate current practices related to their functions.
- Inductees can have a professional retreat to reflect on their supervisory functions in-light of the role expectations, and on the process, they followed to perform these functions. By the end of the retreat, they will submit a report to the senior administration to suggest some improvements to their role-functions.

Monitoring and Evaluation

The vice-president for academics, the HR director, and the ERC director will form a committee to oversee the implementation of the induction program and to monitor the proper implementation of each stage of this program. This committee of senior leaders will first collaborate to set indicators of success for each stage that are based on the learning outcomes. They will also collaborate with each presenter to set

the general guidelines for these sessions based on the learning outcomes. They will also set a schedule for monitoring the completion of the training sessions recommended at each stage of the program in line of a set schedule. The schedule will include the date, and the duration of each session. Moreover, the ERC team will be adding the training sessions to the professional development records of all the presenters and participants. The induction committee will provide feedback based on the monitoring to all those involved in the implementation of the induction program and will convene them to make any modifications to the implementation, whether on the schedule or on the strategies used.

As for evaluating the program, it will include two types of evaluation: (1) an evaluation of the different sessions and of the whole program by the novice subject experts, and (2) an evaluation of the effectiveness of the program by the mentors and senior leaders. Novice subject experts will be requested to evaluate each session of the program. The ERC team will share an evaluation form with the inductees to elicit their feedback on how the content of the session and the strategies used by the presenter helped them understand and perform their functions. The final evaluation for the whole program will be done during the subject experts' retreat where they submit a report to the senior leaders including an evaluation of the program and whether it successfully prepared them for their different functions, as well as suggestions related to improving their role-functions.

The second type of evaluation of the induction program, will be done by the mentors, and senior leaders, mainly the vice-president for academics, and the ERC director. The mentors will be regularly observing the novice subject experts as they perform their functions, especially during the first year of implementation. The mentors

will be looking for evidence confirming the attainment of the learning outcomes and the successful use of the targeted competences and skills by the novice subject experts. Mentors can also meet with the mentees to discuss the observations and to set a development plan based on the emergent needs. Mentors are expected to report on the progress of the novice subject experts not to evaluate them, but to assess the effectiveness of the induction program. This formal reporting should take place at least twice during the first year of implementation. Finally senior leaders can hold a meeting with the novice subject experts towards the end of the first year of implementations. The purpose of this meeting is to follow up on their growth, and to ask for their feedback on the induction program.

Recommendation for Further Research

Since there is a lack of studies on instructional supervision in the Lebanese context (Chmeissani, 2013), and because the research field on middle leadership is still undertheorized (De Nobile, 2018), this single-case study is an attempt to add to the knowledge base on middle leaders performing instructional supervisory functions. However, larger scale research is needed to examine the findings of this study in additional schools in attempt towards generalization of the findings in the Lebanese context. This can be done by conducting a similar study with a larger sample from K-12 private schools in Lebanon.

A further study can be conducted in the same school after a few years to explore whether the perception of the middle leaders' role has evolved with time.

Future studies can focus on schools with different characteristics regarding their size and the programs they offer. Those studies can have as a purpose to compare between the schools having foreign affiliations and those that only offer the national

program. Also, other studies can focus on exploring the differences between the perception of the middle leaders and that of the senior leaders regarding the role, functions, the hindering and supporting factors, and the professional development needs of middle leaders.

It could also be worthwhile to investigate the role, functions, and professional development needs of middle leaders in public and private schools and conduct comparative studies to explore how the contextual factors impact middle leadership in both sectors.

APPENDIX A. INDIVIDUAL INTERVIEW PROTOCOL

Participants will be briefed on the purpose of this study and they will also be informed that the duration of the interview will be between 45-60 minutes.

1. How do you describe your role and functions as an instructional supervisor in this school?

   Possible probes

   - What are the main functions you are expected to perform?
   - Your school offers multiple programs with different curricula; how many of these curricula do you supervise and how?
   - Can you tell us more about the tasks related to the instructional supervisory functions that you are expected to perform? Give examples.

2. What are the major challenges you faced when you first transitioned into your new instructional supervisory role in a school offering multiple curricula?

   Possible probes

   - Looking back at the first year (First few months) of your experience as subject experts, can you recall incidents that reflect the challenges you faced?
   - What were the factors related to the role itself or to the context, that mostly hindered your functions?

3. What forms of organizational support does the school provide to facilitate your transition into your new role?

   Possible probe

- Can you give examples of policies, procedures or practices adopted by the school and that supported you when you started performing your tasks as instructional supervisor?

4. In your opinion, what characteristics in terms of content and approach would make a professional development program effective in supporting novice subject experts in your school?

   Possible probes

   - What content would you suggest for an induction program that aims to prepare middle-level leaders for their instructional supervisory functions?
   - In your opinion, what procedure and practices would be appropriate for such a program?

APPENDIX B. GROUP INTERVIEW PROTOCOL

The researcher will start by explaining that this focus group interview aims at eliciting more details about the themes that she derived after coding the individual interviews. The researcher will also inform the participants that the duration of the interview will be between 60-80 minutes.

1. Suppose a new subject expert is now assuming a role similar to yours; what are some of the obstacles related to the role itself or to the context that you would warn her/him about?

   Possible probe

   - During the individual interviews, most of you mentioned X, Y and Z as factors that hindered your functions when you first transitioned into your role, can you elaborate/explain how?

2. Looking back at your experience as subject experts, which form of support (policies, procedures, and practices) did the school adopt to facilitate your transition into the instructional supervisory role?

   Possible probe

   - Do you believe the school needs to revise/reconsider any of these forms of support? Explain.

3. If your school were to adopt an induction program to prepare middle-level leaders for their instructional supervisory functions, what characteristics in terms of content and approach would make it an effective program?

   Possible probes

   - Can you give examples of content areas that respond to the needs of novice subject experts/that must be covered in this program?

- In your opinion, what approach and practices should this program adopt to successfully prepare novice subject experts for their different tasks in this school?

APPENDIX C. PERSONAL STATEMENT

Self-Interview Question 1 (0 min—6:45)

Describing the role of subject experts and their functions as instructional supervisors at school X. I see their main function as ensuring the implementation of different curricula the different programs, and also the main reason for which these subject experts were appointed is to make sure there is vertical articulation, especially in the case of school X where each cycle is a separate school with its separate leadership team and teachers. There is not much room and possibilities for coordination among the different cycles. Therefore, this need was identified, and subject experts were appointed to perform this function. If I think in terms of the main functions, or at least the functions that me as someone in the school or as the researcher in this study. If I think of the main functions, they are expected to perform I know that they follow up with teachers and where possible in specific cycles with heads of departments and facilitators, first of all to know about the different programs that was at the early stages because they might not be aware of all the 4 programs taught at school X. Then their work was to look for possible gaps, that were identified during different strategies used by the school to ensure articulation. The school had different initiatives, or practices trying to ensure this articulation before these subject experts were appointed. I believe they started from the identified weaknesses and definitely from recommendations coming from accrediting agencies were also helpful to identify the needs. Their main functions I believe were derived from the identified needs. At the PYP program there was a need to cover more topics or to ensure there is substance in the content in the curricula like content wise and not only skills because probably there was this trend of

focusing more on skills than on content. And for the other level, it was another task was to ensure that what is being taught on the mountain campus at AA and at Ras Beirut to ensure this kind of alignment between the two campuses and the 3rd main function is to supervise vertical articulation mainly at the transition levels for instance when students move from elementary grade 5 to middle grade 6 which is the entry level at middle school and then from middle to secondary

The school offers multiple programs, 4 programs with different curricula at different levels. From what I know subject experts are expected to supervise all 4 programs.

If I want to think of specific tasks that are related to curriculum development and implementation usually performed by these subject experts, usually I can think of as I said before, working with teachers at the PYP level to add more content to the curricula. Keep the skills that's very good but add more content, especially with the changes in PYP where we can have standalone subjects such as Math and Sciences. There was more room for content to be added. Also working like liaising between the different level, especially at the entry levels. I know there was a good change in the curricula at grade 6 because this was a weak point since students were facing difficulties adapting to the shift from elementary to middle. Also being aware of all the changes happening especially in the French program because of the reform they have every 4 years.

Self-Interview Question 2 (6:50 min—11:21)

First of all, they needed to clarify their functions, or to translate the job description that was given to them into tangibles and practical practices. Also, to reach a common agreement because probably as a group each one had her/his own interpretation of what to do and when to do it. I believe it took them a while to get to a common understanding regarding their functions. This might have created some

challenges between people in a group having the same title or expected to have the same functions, like to come to a common agreement. I believe this is a major challenge. Two, school X never had subject coordinators, and if they had them, they had them for few subjects. I know they had someone for Arabic for a certain period who was supposed to supervise Arabic language from K-12. They had someone for French but basically his role was middle and secondary. school X is not the school with coordinators they never had one for science, they never had one for Math. So, creating this new position is a challenge by itself for stake holders and members of the community to accept it. Especially that at certain levels they have Dept. chairs. So, there was this issue of defining tasks and not stepping into someone else's territory.

I can also think of factors related to the role and the context, such as the complexity of the structure. These subject experts need to report to the VP for academics because finally they refer to her, all issues related to curriculum are referred to her. I also believe they have accountability vis a vis the school where they are full timers. Some of them are full timers at the secondary school, and some at the middle school, so probably there is this reporting issue I believe. They have to deal with the dept chair or what they call facilitator at the secondary school. So, again this might have created conflict; what are my tasks, and where does my role end, and when does the role of the department chair starts. So, again defining and setting borders for the role of each. Definitely, give the spirit at school X where teachers are kind of treated as professionals, independent, the teacher has wide margin of freedom in his class etc. It was not easy for teachers to accept this extra layer of supervision. So subject experts had to be very cautious on how to approach teachers, when to suggest change and how to suggest it.

Self-Interview Question 3 (11:25 min—15:22)

Regarding this question, the 1st thing that comes to my mind is the clear job description. Job descriptions at school X are usually developed by more than one person and not only the HR, but also people to whom these subject experts have to report. I believe-not really sure- that the VP for academics was part of developing the job description, so is the ERC director because I know he supports the VP when it comes to academics, definitely representatives from the HR, maybe also like during a directors' meeting they brainstorm. These are my hypotheses, again I did not ask, maybe it's worth asking who came up with the job description, I can add this to my list. What else, the clearness of the job description is a plus, also what helps at school X are the open channels, any of these subject experts when they were nominated, probably he/she came to his/her director and talked to them about this transition, their opinion regarding the pros and cons, the challenges. I'm sure this also helps. Some of them also refer to some of the colleagues they trust. I know one of them talked to me about this shift before she accepted, so we brainstormed the pros and cons. What else, lately school X like 3 years ago, sub exp, were still at the early stages, school X asked a consultant to work on the organizational structure, to set clear procedures regarding certain functions and practices at school X. This is an area where I might need to investigate, It might come from the interviews with them or I might ask around to know more details. I'm sure the updated organizational structure made it clear who reports to them, who needs to collaborate with subject experts and to whom they need to report.

I know they have weekly meetings with the VP who is also a subject expert, so these regular meeting might have helped them at the early stages have a common

understanding and speak a common language. It gave them a good guidance on what to do in each of the cycles.

Regarding policies I'm not sure if we have policies related to their role and functions, maybe while looking for school documents I can find something of the sort.

Self-Interview Question 4 (15:26 min—22:41)

I know that lately instructional leaders, principals, and their assistants are attending summer courses offered by PTC. This was not the practice before; I know it came with one of the presidents at school X who encouraged the school to do that. These subject experts did not have a special training to prepare them for their tasks or functions. Definitely there is a need and that's why I thought of this topic, definitely it comes from a need. Now content wise I believe they need training on how to design curricula, what is a curriculum, what are the elements of a curriculum, if we want to document our curricula even if we are not really developing a curriculum, what are the elements. For instance, in the French programs they do not develop the curriculum, they might have a contribution in developing curricula in the high school /CPP program because we are taking common core standards or other standards, then we are picking topics that meet these standards. There is some space/room for them to develop/to add in the CPP program and maybe a little bit in Lebanese program. When we say we teach the Lebanese program, definitely we cover all the topics, but there are adds on because we want our students to be skilful in certain areas and to have knowledge in topics related to what the Lebanese government has set as themes. However, for instance in the IB-DP program there is not much room for adds on, similarly in French Bac program at the secondary school mainly, because the program is set by the BO and we do not have the flexibility to change a lot.

What they need here when the programs are pre-set, is a way of documenting the curriculum. Which template to use and if the template can be adjusted, what elements to show what is important to reveal when we are documenting a curriculum. These areas of curriculum writing, or curriculum development are important. Also, assessment component because when talk about curriculum there is definitely the assessment component related to it. All the elements or components that can help regarding assessment; what to assess and how to assess it especially now that we are working remotely with students this is also an area, they need training on.

Finally, if we talk about procedures and practices, personally I see it like an in-service training, that's why the idea came as an induction program. There is a big chunk that they need to be trained on before they start their function. For example, if they are appointed end of June of an academic year, then early in September or late August before school starts, they have alike a crashed week of training to help then to give then the push to start the year, there will be set in service days where they continue their training with a lot of feedback during the process. So, the feedback they provide to the school or to the training team they are working with is very important. There will be a lot of trial-and-error work, they need to implement and try practices or procedures that were introduced to them during the training. They apply whatever they were learning, observe, there will be a lot of observation on their behalf, a lot of data collection that will support whether the practices they are implementing are successful or not. So, a lot of mutual correspondence between those training them and the trainee. The support or training has to be intensive at the beginning and then it can be spaced out usually an ideal induction program extends over 2 years, sometimes 3, but I believe 2 years are enough especially that at school X we have this idea of having professionals being

under observation for 2 years before they become on a full-time basis contract, So the same idea can be applied to these subject experts where they can have 2 years training until they become somehow independent.

APPENDIX D. JOURNAL SELECTION

Interview with Participant FSE1

Describing the Context and the Interview Process

After receiving the online invitation, the participant directly replied and confirmed her participation in the study. She also suggested a time for the interview. The interview was conducted via Zoom, I was at ERC, in a private room, while the participant was home in a private room too. Before starting the interview, the participant explained that sending the questions ahead of time was very helpful and that she needed the time to think about these questions and prepare the answers. During the first few minutes of the interview, we had our cameras on for some socialization. The participant confirmed that she will be sending the signed consent form. I asked again if she accepts to audio tape the interview and suggested turning the camera off. The interview was conducted in English; I briefly explained the purpose of the study and then asked the first question. Participant FSE1 provided sufficient details and examples when answering the first question, I did not need to use the probes.

As for question 2, I asked the participant for her opinion on whether the challenges were related to the role or to the context. For question 3, there was no need to use any probe. For question 4, I had to probe to get the participant's perspective on the procedure to be adopted.

Tips for the Next Interview

- Remember to specifically probe on tasks related to curriculum development and implementation

- Avoid commenting during the interview, it affected the automatic zoom transcription
- Try not to use Zoom auto-transcribe (for English interviews), it did not save much time.
- No need to summarize the responses after each question. I assumed that it's a form of member's check, however after consulting my advisor, I found out that members check is done to confirm the themes after the coding process.

Transcribing the Interview

The interview was audio taped on Zoom and I used the "Audio with transcription" option on Zoom. However, I had to edit and correct the automatically transcribed interview because the system did not properly transcribe all the words especially when the participant was using Arabic.

Coding

The transcribed interview was coded using the "open coding" method. A text box was inserted in each page of the word document. Some selections were highlighted, and the corresponding code was written in the text box. Some statements were also underlined to designate that they can be used as quotes during data analysis.

Additional Notes

The transcribed interview with FSE1 was sent to a fellow researcher along with the research questions and the interview questions for coding checks. The researcher made sure to delete any identifier (names used during the interview, name of the school, subject he/she supervises, etc..) that might hint to the identity of the participant or the school under study. Such identifiers were replaced by school X, Subject X, Topic X,

Teacher X, etc. The fellow researcher coded the interview and sent it to the researcher. Comparing the two coded versions, shows a high level of agreement between the codes used by the two researchers.

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APPENDIX E. GROUPED CODES DEFINING THE THEMES

Theme	Sub-themes	Grouped Codes
Defining the Role	Pedagogical leaders	Subject experts have the role of pedagogical leaders rather than administrative leaders
	Resource person for teachers	They have the role of facilitators/resource person that support teachers in implementing curricula
	Implementors of change initiatives	They act as change agents to facilitate/sustain school improvement
Profile of the Selected Subject Experts	Good knowledge of the school system	Subject experts are selected among experienced teachers with a good knowledge of the school system including some of the programs taught at the school
	Instructional supervisory experience	They have a professional experience as instructional supervisors in addition to their experience as teachers
Coordinating the Development of Multiple Curricula	Development of curriculum material	Supervising the development of curriculum material as needed in the different programs and cycles: - Scope and sequence - Units - Lessons - Activities
Supervising the Implementation of Multiple Curricula	Ensuring the implementation of the written curricula	Ensuring the proper implementation of the content, approach, and skills set by each of the 4 programs
	Vertical articulation of curricula	Subject experts coordinate with other middle leaders to ensure smoother transition between cycles
	Horizontal articulation between two campuses	They coordinate/liaise between the 2 campuses to ensure harmonization in implementing the curricula
Evaluating Multiple Curricula	Evaluating multiple curricula	Subject experts revise curricula, identify the needs, and coordinate with other middle leaders to update these curricula
Supporting teachers	Needs Assessment	Conducting class visits to collect data on the taught curriculum and to identify teachers needs
	Providing Training to Sustain Teachers' Growth	Providing training and support material for teachers to meet their needs
Role Related Challenges	Lack of shared understanding for the role	The subject experts' role is not clearly understood by all the other stakeholders

	Insufficient preparation to perform the expected function	Challenges resulting from insufficient preparation for the functions under this role
Context Related Challenges	Insufficient time	Insufficient time allocated to perform the various functions under the assigned role
	Complex school structure	A complex school structure comprising six separate cycles and where multiple programs are taught and procedures are not always uniform
Currently Existing Forms of Organizational Support	Clear job description	Clear job description that was revised by senior leaders to meet the school needs
	Buy-in of senior leader	Buy-in/support of senior leaders translated by offering some workshops and by providing resources to meet the needs of subject experts
	Regular meetings	Regular meetings that enhance the collaboration among the subject experts
Suggested Forms of Organizational Support	Formal preparation	A formal preparation of novice subject experts for their functions
	More buy-in at the level of directors	More buy-in at the level of the directors of the different cycles
Content of the Proposed Program Suggested by the Subject Experts	Role-Functions Topics	Training the subject experts on the following functions: - Curriculum writing and evaluation - Designing PD sessions - Supporting teachers, - Adapting school-level initiatives to meet the specificity of their subject
	Interpersonal Skills	Training to further develop interpersonal skills that help the subject experts perform their functions
Procedure for Implementing this Program	Ongoing training	Ongoing training that starts at the beginning of the academic year, and that ensures follow up during the course of the year
	Encourage Mentoring	Encourage mentoring of novices by more experienced experts
	Flexible plan	Flexible plan to meet emerging needs

REFERENCES

Al-Kiyumi, A., & Hammad, W. (2020). Preparing instructional supervisors for educational change: Empirical evidence from the sultanate of Oman. SAGE Open, *10*(2), 1-10. https://doi.org/10.1177/2158244020935905

Achille, C., & Romey, M. (1990). Evaluating preparation programs for school Administrators, in M. F. Berney et al. (eds.), *Evaluating preparation programs for school leaders and teachers in specialty areas*. (pp.13-31) Springer Netherlands. https://doi.org/10.1007/978-94-009-2199-3

Bassett, M., & Shaw, N. (2018). Building the confidence of first-time middle leaders in New Zealand primary schools. *International Journal of Educational Management, 32*(5), 749-760. https://doi.org/10.1108/IJEM-05-2017-010

Bouckaert, M., & Kools, Q. (2018). Teacher educators as curriculum developers: Exploration of a professional role. *European Journal of Teacher Education*, *41*(1), 32-49.

Boavida, T., Aguiar, C., McWilliam, R. A., & Correia, N. (2016). Effects of an in-service training program using the routines-based interview. *Topics in Early Childhood Special Education*, *36*(2), 67–77.

Chmeissani, A. A. (2013). *A proposed profile of the roles, functions, and contextual factors of the instructional supervisor as perceived by teachers, instructional supervisors, and principals in private schools* (Unpublished master's thesis, American University of Beirut, Beirut, Lebanon)

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc. https://doi.org/10.4135/9781452230153

Creswell, J. (2007). *Qualitative inquiry and research design* (3rd ed.). California: Sage publications.

Cunningham, J., & Hillier, E. (2013). Informal learning in the workplace: key activities and processes. *Education + Training*, *55*(1), 37-51.

Dillon, J. T. (2009). The question of curriculum. *Journal of Curriculum Studies, 41*(3), 343-359.

De Nobile, J. (2018). Towards a theoretical model of middle leadership in schools. *School Leadership & Management*. *38* (4) 395-416. https://doi.org/10.1080/13632434.2017.1411902

Drago-Severson, E. (2004). *Helping teachers learn: Principal leadership for adult growth and development*. Thousand Oaks, CA: Corwin Press.

Drago-Severson, E. (2011). How adults learn. *JSD/www.learningforward.org 32*(5) 10-12.

El-Murr, H. (2015). *Understanding how instructional supervisors promote teachers' professional learning in the Lebanese context: a multiple case study of two private schools*. (Unpublished master's thesis, American University of Beirut, Beirut, Lebanon)

Gall, J. P., Gall, M. D., & Borg, W. R. (2010). *Applying educational research: How to read, do, and use research to solve problems of practice* (6th ed.). Boston: Pearson.

Gerrevall, P. (2018). Making sure it's the right one: Induction programme as a gatekeeper to the teaching profession. *Scandinavian Journal of Educational Research,* 62(4), 631-648. https://doi.org/10.1080/00313831.2016.1261043

Ghamrawi, N. (2013). In Principle, It is Not Only the Principal! Teacher Leadership Architecture in Schools. *International Education Studies*, *6*(2), 148-159. https://doi.org/10.5539/ies.v6n2p148

Glickman, C., Gordon, S., & Ross-Gordon, J. (2010). *Supervision and instructional leadership* (8th ed.). Boston:Pearson.

Gurr, D., & Drysdale, L. (2013). Middle-level secondary school leaders: Potential, constraints and implications for leadership preparation and development. *Journal of Educational Administration*, *51*(1), 55-71.

Guskey, T., & Yoon, K. (2009). What works in professional development? *The Phi Delta Kappan*, *90*(7), 495-500.

Harris, A., & Jones, M. (2017). Middle leaders matter: Reflections, recognition, and renaissance. *School Leadership & Management, 37*(3), 213-216.

Harris, A., Jones, M., Ismail, N., & Nguyen, D. (2019). Middle leaders and middle leadership in schools: exploring the knowledge base (2003–2017). *School Leadership & Management*. *39*(3-4) 255-277. https://doi.org/10.1080/13632434.2019.1578738

Hashem, H. (2013). *Experiences of novice teachers in private K-12 school in Beirut: Challenges and opportunities*. (Unpublished master's thesis, American University of Beirut, Beirut, Lebanon)

Itani-Malas, G. (2019). *Teacher leadership in the context of promoting sustainable school improvement: a case study of private schools in Lebanon* (Unpublished Ph.D. thesis, Saint Joseph University, Beirut, Lebanon). Retrieved from search.shamaa.org

Irvine, P., & Brundrett, M. (2016). Middle leadership and its challenges: a case study in the secondary independent sector. *Management in Education 30(*2) 86–92.

Javadi, V., Bush, J., & Ng, A. (2017). Middle leadership in international schools: evidence from Malaysia. *School Leadership & Management, 37*(5), 476-499.

Jureidini, S. (2018). *An investigation of the perception of Lebanese school leaders and teachers of building school capacity for sustainable school improvement*. (Unpublished master's thesis, American University of Beirut, Beirut, Lebanon)

Karami- Akkary, R. (2014). The role and role context of the Lebanese school principal: Toward a culturally grounded understanding of the principalship. *Educational Management Administration & Leadership. 42*(5) 718–742.

Karami- Akkary, R. (2019). مراجعة تحليلية للدراسات الموثقة في شمعة حول الإدارة التربوية في البلدان العربي Study review on educational administration in the Arab countries. *Idafat: Social Sciences Arabic Journal. 45(1) 67-90.* Retrieved from www.shamaa.org

Knowles, M. S., Holton, I. E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development*. Retrieved from https://ebookcentral-proquest-com.ezproxy.aub.edu.lb

Lee, T., Cheng, Y. C., & Ko, J. (2017). Curriculum reform with a school-based approach: intellectual, structural and cultural challenges. *School Leadership & Management, 38*(3), 278-301.

Lochmiller, C. (2014). Leadership coaching in an induction program for novice principals: a 3-year study. *Journal of Research on Leadership Education*. *9*(1) 59–84. https://doi.org/10.1177/1942775113502020 jrl.sagepub.com

McNiff, J. (2002). *Action Research for professional development: Concise advice for new action researchers* (3rd ed.). UK: September Books.

Mattar, D. (2012). Instructional Leadership in Lebanese Public Schools. *Educational Management Administration & Leadership, 40* (4) 509-531.

Merriam, S. B. (2001). Andragogy and Self-Directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education, 2001*(89), 3-14. https://doi.org/10.1002/ace.3

Merriam, S. B., & Tisdell, E. (2016). Qualitative research: a guide to design and implementation. (4th ed.). San Francisco, CA. Jossey-Bass

Mertler, G. (2017). *Action Research: Improving Schools and empowering educators* (5th ed.). Thousand Oak, California: SAGE publications.

Morgan, D. (1997*). Focus groups as qualitative research* (2nd ed.). California: Sage publications.

Ng, S., & Kenneth-Chan, T. (2014). Continuing professional development for middle leaders in primary schools in Hong Kong. *Journal of Educational Administration, 52*(6), 869-886.

O'Neill, G. (2010). Initiating curriculum revision: Exploring the practices of educational developers. *International Journal for Academic Development*, *15*(1), 61-71.

Ornstein, A., & Hunkins, F. (2017). *Curriculum: Foundations, principles and issues* (7th ed.). Boston: Pearson Education.

Overview of the program. (n.d.). tamamproject. Retrieved January, 4, 2022 from https://tamamproject.org/overview-of-the-program/

Pawlas, G. E., & Oliva, P. (2008). *Supervision for Today's Schools* (8th ed.). NJ: John Wiley & Sons.

Sergiovanni, T. J., & Starratt, R. J. (2007). *Supervision: A redefinition* (8th ed.). Boston: McGraw Hill.

Shawer, S. (2010). Classroom-level teacher professional development and satisfaction: teachers learn in the context of classroom-level curriculum development, *Professional Development in Education*, *36*(4), 597-620. https://doi.org/10.1080/19415257.2010.489802

Thorpe, A., & Bennett-Powell, G. (2014). The perceptions of secondary school middle leaders regarding their needs following a middle leadership development programme. *Management in Education*, *28*(2), 52–57.

Trotter, Y. D. (2006). Adult learning theories: Impacting professional development programs. *Delta Kappa Gamma Bulletin*, *72*(2), 8.

Voogt, J., Pieters, J., & Handelzalts, A. (2016). Teacher collaboration in curriculum design teams: effects, mechanisms, and conditions. *Educational Research and Evaluation*. 22 (3-4), 121-140. https://doi.org/10.1080/13803611.2016.1247725

Wiggins, G., & McTighe, J. (2005). *Understanding by design*. Retrieved from https://ebookcentral-proquest-com.ezproxy.aub.edu.lb

Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research, 79*(2), 702-739.

Zepeda, S. (2003). *Instructional leadership for school improvement*. Retrieved from https://ebookcentral-proquest-com.ezproxy.aub.edu.lb

Zepeda, S. (2015). *Job-Embedded Professional Development*. New York: Routledge. https://ebookcentral-proquest-com.ezproxy.aub.edu.lb

Zepeda, S., Parylo, O., & Bengtson, E. (2014). Analyzing principal professional development practices through the lens of adult learning theory. *Professional Development in Education, 40*(2), 295-315.