

**Exploring ‘Policy Learning Communities’: A case
study of the Arabic language curriculum policy
community in the United Arab Emirates**

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'I, Mariam Omran Al Hallami, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.'

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Abstract

This study explores, theoretically and empirically, the concept of Policy Learning Communities (PoliLCs) as a model to facilitate collaborative learning in policymaking. Collaborative learning refers to the process of policymakers collectively updating beliefs and policy choices based on evidence. The notion of Evidence-Informed Practice (EIP) has emerged in policy literature as enhancing the rationality of policymaking decisions. Yet, ensuring that evidence positively impacts the policymaking process remains challenging, largely due to issues around linking researchers and policymakers in ways that promote trust, conversation and sharing of ideas and learning. PoliLCs (Stoll 2008; Brown 2013) are thus defined and used as a framework to explore an interactive, government-initiated learning process connecting policy and non-policy actors in policymaking collectives that address shared policy problems via a critical, ongoing, collaborative, and inclusive process.

The literature review provided a critical evaluation of collaborative learning models to establish the theoretical grounding of PoliLCs. The resulting theoretical framework framed the study's empirical investigation of the Arabic language curriculum policy community, established by the Ministry of Education in the United Arab Emirates. The study sought to identify learning in this case to examine the concept of PoliLCs, provide an account of how and why actors engage in learning and interaction, and identify lessons to further EIP in the UAE. A Social Network Analysis (SNA) survey was used to identify basic levels of interaction within the policy community, as well as a smaller interview sample. Nineteen members completed the survey, and seven were interviewed. Thematic analysis was employed to analyse and report these data.

This study argues that the PoliLCs framework can effectively describe and explore learning in policymaking, as it provides a systematic model to engage policy actors in learning and evidence use. While this study sought to examine a case study in UAE of PoliLCs, further research may develop the concept and improve its utility in policymaking and knowledge sharing more globally.

Statement of Impact

The knowledge and findings of this study provide contributions within, and outside, academia. First, the benefits of this research to academia are based on the contribution the research makes to the discipline of policy learning, specifically, the theory development and grounding of the concept of learning communities in policy settings, which can be seen through the conceptualisation of PoliLCs. Prior to starting this research, the concept of PoliLCs was proposed as a model for engaging policymakers with and in learning. Yet, the concept had not been tried in empirical studies, nor had the literature developed past the initial theorisation by Stoll (2008) and Brown (2013). Thus, my study is an attempt to further the discussion of PoliLCs. As such, I will publish my research in peer-reviewed journals, and participate in conferences to engage in critical discussions surrounding PoliLCs and policy learning.

Additionally, the framework developed in this study is a possible contribution to methodological work on PoliLCs. The framework presents variables that can act as a foundation for researchers willing to explore the concept of PoliLCs further. Another contribution to methodology is the use of Social Network Analysis (SNA) as a data collection technique, as well as a sampling technique to select interview participants. In particular, the use of a SNA survey in a qualitative case study for descriptive purposes. Beyond the concept of PoliLCs, the study presents possible academic impacts in the areas of evidence utilisation, and learning in social interaction settings. One example of this academic impact is the finding on the practices of the UAE's Ministry of Education, where the policy community is systemically integrating learning interactions and evidence use in its decision-making processes. This finding is

not bounded by the policymaking setting or local context, and can be relevant to other areas such as business and health.

Outside academia, this study has potential impact on the professional practice of decision-making in policy settings. For organisations involved in policymaking, that means the ability to identify existing policy communities to support policy development with learning and evidence use. As a practice, the PoliLCs model can be supported at local, regional or international levels. For individual policymakers, awareness of PoliLCs and its potential benefits to individual learning and policymaking may promote policymakers to engage in existing policy communities, and support them with learning. For researchers and subject experts who are keen to support policy development, the PoliLCs concept provides a rationale to engage in policy/academia interactions. For instance, subject experts or academics can attempt action research to support policy communities to develop learning practices. To actualise the benefit of this study in practice, I will be preparing an executive summary of the findings of the study to share with policymakers in the Ministry of Education beyond those involved in my selected sample. In particular, actors in higher positions within the Ministry such as the Minister of Education himself and his deputy, to promote the concept as a support framework for EIP.

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List of Abbreviations

EIP	Evidence Informed Practice
BERA	British Educational Research Association
CoP	Communities of Practice
ETF	European Training Foundation
FNC	Federal National Council
IB	International Baccalaureate
MENA	Middle East North Africa
MOE	Ministry of Education
OECD	The Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PLCs	Professional Learning Communities
PoliLC	Policy Learning Communities
SNA	Social Network Analysis
TIMSS	Trends in International Mathematics and Science Study
UAE	United Arab Emirates
WGS	World Government Summit

1 Introduction

This research aims to explore collaborative learning in policy communities. This refers to the process through which policymakers collaboratively update their beliefs and policy choices based on evidence, experience, and knowledge utilisation (Newig *et al.* 2016). In this thesis, learning is seen to emerge when policymakers interact with one another, specifically when discussing or revising policy (Sabatier, 1988). Within these collaborative structures, knowledge is mobilised by individual actors, through the process of social interaction (Hecl, 1974). A new and potentially useful concept to base such an exploration on is the emerging concept of Policy Learning Communities (PoliLCs). This study defines PoliLCs as:

An interactive government-initiated learning process where actors are grouped in policymaking collectives to address specific, shared policy problems via a critical, ongoing, reflective, collaborative, growth-promoting, and inclusive process.

This initial definition of PoliLCs stems from the works of Stoll (2008) and Brown (2013), which are the only two published mentions of the concept in literature. This study aims to explore PoliLCs as a potential framework to understand and facilitate learning in policymaking.

This study opens with the proposition that the policy process in the United Arab Emirates (UAE) can benefit from facilitating learning between the actors involved in policymaking. Specifically, as this study is dealing with the policy area of education in the UAE, which has been constantly scrutinised for policies not achieving positive outcomes, a framework like PoliLCs could be beneficial to enhance outcomes of education policies.

My research study focuses on the work of the Arabic language curriculum policy community within the Ministry of Education (MOE) in the UAE. The community is concerned with developing curriculum policies and content

standards for the subject of Arabic language, which is mandatory in all schools in the country from primary years to secondary grade levels.

My exploration of policy communities as a way to improve policymaking stems out of two personal experiences. First, throughout my primary to secondary schooling journey in the UAE, and looking at it retrospectively, I experienced first-hand the impact of ineffective curriculum policies. I refer specifically to policies related to the teaching and assessment of Arabic language, which I believe fell short in equipping students with the solid foundation in written and spoken Arabic according to frequent reported news (Salem, 2013). My growth in grasping and speaking the English language, a subject where its curriculum was an international adoption rather than nationally developed, was improving every year.

The second experience informing my interest in researching policy communities occurred when working for a philanthropic foundation in Abu Dhabi. Mandated by the executive council of the local government of Abu Dhabi to work closely with Abu Dhabi local education authority to develop education initiatives, the foundation was presented with the challenge of missing data and research to use when informing policy decisions. These experiences left me with more questions than answers, and the desire for further immersion in the academic field that culminated in this thesis.

This introductory chapter begins by exploring and defining the wider theories underpinning this research. It then presents the research purpose and significance, and concludes with an exploration of the research context.

1.1 Learning as a tool to inform policy

This study draws primarily on the concepts of collaborative learning in policymaking, and secondarily around concepts of knowledge mobilisation, research utilisation, and evidence-informed policymaking. In policy domains around the world, demand for learning is on the rise (Dunlop *et al.*, 2018). For this study, policy is defined as “whatever governments choose to do or not to do” (Dye, 1992, p. 2). Policymaking in this thesis refers to the process of formulating policy, as in, the process involving governments making choice especially in politics.

An integral question for me as a researcher seeking to identify models to support better policy design and outcomes, is why policy actors should be concerned or pressured to learn? Additionally, what would the benefits be for policy actors, if researchers, practitioners, and policymakers paid deliberate attention to how policy actors are working together and the influence of that collaboration on the potential for research to inform policy and practice. One primary reason for exploring this topic is that the public policy literature often associates policymaking with uncertainty or problem tractability (Checkel, 1998; Jasanoff, 1987). Heclo (1974) best describes this uncertainty in the definition of policymaking as “a form of collective puzzlement on society's behalf; it entails both deciding and knowing” (p. 305). As such, learning is put forward as a solution to the problem of puzzlement and uncertainty. Collectively, through learning, policymakers explore what can be achieved together, what problems can be addressed, and how to address them (Lindblom and Cohen, 1979). Through these collective efforts, policymakers are engaged in the process of social learning—the acquisition of knowledge by interacting with other actors (Heclo, 1974).

Through policymaker's interactions, knowledge is mobilised as information between actors flows in the policy community (Levin, 2004). In the literature review, I explore the different sources of research learning that are potentially available for policy communities. However, I focus attention on what it means for policymakers to learn from evidence and research. Consistently through this thesis, evidence refers to learning sources that include expert knowledge, research, consultation, statistics, and policy evaluation (Cabinet Office, 1999).

The nexus concept at the centre of evidence and policymaking, is often referred to as 'evidence-based' or 'evidence-informed' decision-making. Evidence-based or informed decision-making is the process of using the best available evidence and research as a basis for policy development and implementation (Davies, 2004). Together, the concepts of policy, collaborative learning, social learning, knowledge mobilisation, and evidence-based policymaking make up the theoretical dimensions of this study. Thus, this study sits theoretically in the midst of policy science and the concepts of collaborative learning, which are grounded in the fields of organisational and educational sciences. As such, the study contributes in understanding the role and benefit of learning in the process of policymaking by linking findings from the policy, education and learning literature.

1.1.1 How learning from evidence can inform policy

According to the literature, policymaker learning from evidence, mainly scientific research has been advocated over the past half-century by reformers in western governments, to improve the efficiency and effectiveness of the policy formulation and implementation process. Improving the effectiveness of policy formulation was suggested to be possible through applying policy evaluation when addressing policy problems (Sanderson, 2006; Mintrom,

2007). More importantly, social scientists and policymakers are often urged to work with one another to determine what works and why, and what policy initiatives are likely to be most effective in a given situation (Blunkett, 2000). Thus, policymakers and social scientists individually play a critical role in if, what and how evidence may be used in policymaking. Specifically, scientists who play a role in determining what possibilities and choices are available to encourage policymaker engagement with evidence (Pielke, 2007). Policymakers are seen as responsible for using evidence to improve policy design and implementation choices (Pielke, 2007). Hence, adopting a more deliberate approach to encourage academic researchers and policymakers to engage in evidence informed policy making is important.

A main challenge facing evidence-informed policymaking is ensuring that research evidence has greater impact on the policymaking process (Nutley *et al.*, 2002; Gough, 2004). Policy actor learning throughout the policymaking process occurs when an individual or a group is exposed to information or knowledge and reflects upon it (Rietig and Perkins, 2018). A greater impact of the policy actor learning is achieved when learning is shared amongst individuals, understood, and used to improve the overall design and implementation of policy. Machlup (1993) identifies six forms of evidence utilisation:

(1) receiving it and thus getting a chance to read it; (2) receiving and actually reading it; (3) receiving, reading, and understanding it; (4) receiving, reading, understanding, and appreciating it; (5) receiving, reading, understanding, appreciating, and making it the basis of a decision; or (6) receiving, reading, understanding, and appreciating it, plus letting it help you in making a decision and taking an action (or refusing to act) in line with the decision reached with the help of the knowledge obtained. (p.. 449-450)

The sixth step in Machlup's levels of evidence utilisation is also referred to in Weiss (1979) research utilisation models as the instrumental use of

evidence. Wherein the learning is internalised and plays a role in decision making, which is then influenced by the information obtained. The instrumental use of research focuses on adopting research results directly to inform choice (Lavis *et al.*, 2003). Furthermore, Weiss (1979) presents six models of research utilisation in governments: the knowledge-driven model, problem-solving model, interactive model, political model, tactical model, and the enlightenment model. These six models are expanded in Table 1.1.

Knowledge-driven model: Basic research is conducted, applied, and as a result development and application of findings are undertaken.
Problem-solving model: Involves the direct application of social science research and findings to a pending decision.
Interactive model: Sees research to enter the decision process as part of the policymaker's search for knowledge.
Political model: utilises research to support decision-makers' predetermined position.
Tactical model: Research is used as a tactic to avoid responsibility for failing policies, or unpopular policy outcomes.
Enlightenment model: Research is not directly sought, but has an indirect influence on policy.

Table 1.1 Research utilisation models (Weiss, 1979)

Out of the six models presented, from my experience within the policymaking process in the UAE, the problem-solving and interactive models are two potential forms of how learning from evidence can become manifest in policymaking. Ideally, as public policy problems emerge, information and knowledge is gathered from the existing and commissioned research evidence, processed and then shared between policymakers to determine a suitable course of action. Research can be utilised to inform policymakers if they are deliberately seeking evidence related to a certain problem to inform choice, or

interacting with one another in policy communities to find information to make a choice.

While research literature has demonstrated the potential of evidence for the development of policies, it is not always utilised by policy actors for many reasons. For instance, values, beliefs and ideology are seen as a driving force behind decisions in policy processes (Brown, 2013). According to Brown (2013), any realisation of evidence-informed policymaking will depend upon the creation of knowledge that conforms to existing and dominant ideological and epistemological paradigms. Policymakers often disregard evidence in their decision-making process because it is either impractical to their context, poorly synthesised, or lacks credibility (Maynard, 2006). As a result, policy is therefore often implemented without evidence (Weiss, 1991). Evidence itself does not provide answers, but creates a basis upon which decision-makers are able to make better-informed choices (Davies, 2004). It still remains a challenge that research findings are found to have limited direct influence on policies (Boswell and Smith, 2017). If anything, research provides data and empirical generalisation that will affect the way policymakers think about a problem (Weiss, 1982).

While I realise that learning, evidence, and research are multiple sources inform policymaking, I argue that it is critical for actors involved in the development of public policies, especially in areas of on-going uncertainty, to seek evidence-based practices. An example of a policy area of on-going uncertainty is education policy in the UAE, which is the focus of this research study. Hargreaves (1996) argues that educational research should be a central component of education policymaking. Research utilisation and evidence-informed policymaking have been explored in the literature for more than a decade, and advocated for over the past half-century by reformers in

governments, to improve the efficiency and effectiveness of the policy formulation process (Sanderson, 2006; Mintrom, 2007). Yet, in the context of education policy in the UAE, evidence and research use in policymaking remains unexamined. Particularly, in the UAE, publicly available information and research on the policy processes and learning within decision-making in public policy does not exist.

1.1.2 The global and local dimension of knowledge mobilisation in education policy

The past 20 years have seen shifts in education policy across industrialised and western countries, with governments feeling the urge to continuously re-examine many aspects of their education provision (Levin, 1998). Amongst these reforms, common trends and themes emerge which suggests the influence that national and regional governments may be having on one another. These instances of what's been termed 'policy borrowing' results in practices of learning through policy transfer and borrowing between educational systems (Dolowitz and Marsh, 2000). According to Dolowitz and Marsh (2000: 5) policy transfer is the "process in which knowledge about policies, administrative arrangements, institutions and ideas in one political setting is used in the development of policies, administrative arrangements, institutions and ideas in another political setting". As a result, knowledge and learning on various public policy challenges has expanded beyond the state itself. As global trends of policy reform create an impact on local education policymaking, policy creation is no longer restricted within the boundaries of the state (Jessop *et al.*, 2008, p. 391).

Education policy is also often being formulated outside the boundaries of the country, where new actors and organisations are constantly being added to the picture (Ball, 2012). Policies at the national level are often being

developed, implemented and evaluated within a web of global connections as argued by Rizvi and Lingard (2010), new “policy networks and communities” are being established through which specific knowledge and discourse flows and gains credibility (Ball, 2012, p. 9). These networks not only involve national governments, they include international organisations such as the Organisation for Economic Co-operation and Development (OECD), the World Bank, and transnational corporations, which together constitute a new form of policy governance that often brings new actors of authority into the domestic policy process (Ball, 2012).

The United Arab Emirates—an OECD member country—has received its share of international education policy influences as a result of knowledge mobilisation on the international level (Lootah, 2011). Particularly, the 21st century has witnessed frequent curriculum reforms as the UAE joins the race for global competitiveness (ibid, 2011). These nationally-initiated reforms have been largely geared towards the development of 21st century skills, and the English language is a key element for these developments. Consequently, shifts based on learning, expert opinions, and practices in other countries have resulted in the UAE reforming its curriculum policies in alignment with international competition (ibid, 2011). The availability of information from international assessments such as the Programme for International Student Assessment (PISA) a worldwide study by to evaluate educational systems by measuring 15-year-old school students performance on mathematics, science, and reading—and the Trends in International Mathematics and Science Study (TIMSS)—an international assessment of mathematics and science knowledge of students around the world in 4th and 8th grade— provided data and pressures to reform national education. While the data from PISA are able to provide countries with a view of how they compare, it creates pressure to

emphasise test-driven accountability and standardization. Consequently, pressures from PISA scores tend to have more impact on education policy in the UAE than government strategies do

1.2 Research purpose and significance

This study attempts to explore the concept of Policy Learning Communities—theoretically and empirically—through examining the Arabic language curriculum policy community in the UAE’s MOE. It seeks to contribute to knowledge in the following ways:

- **Theory development:** Explore the theoretical ground and framework of PoliLCs by using literature from public policy, education, and learning. The concept is in its early stages, and little empirical work has been undertaken to assess the applicability and usefulness of the concept in public policy.
- **Model development:** Use PoliLCs to provide a framework, or ‘model’ for the discussion of actors’ learning and interaction in policy communities. The literature on policy communities and interaction is limited in terms of exploring factors that impact of actors’ interaction in policy communities.
- **Contribution to methodology:** Utilise Social Network Analysis (SNA) in a constructivist approach. The study uses SNA to support the case study approach adopted. SNA is used to map out the community members and their interaction as a method to identify the interview sample, and understand basic characteristics of all community members.

Contribution to context: Provide an account of policymakers’ learning, interaction, knowledge mobilisation, and research utilisation in a new context. The majority of the literature on policy learning is developed and investigated in the western world. There

are no publicly available studies conducted in the context of the UAE. This thesis will be first to do.

The findings of this study have the potential to support: 1) policymakers who want to utilise knowledge and research to inform and enhance their decision-making practices; 2) subject experts and researchers who want to inform policymakers on best practices or models of what works; 3) subject primary and secondary teachers who want to share and exchange learning on curriculum and policy to support their practices and future policy. On a macro level, implications of this study are significant to policymakers who want to use evidence-based practices in policymaking.

1.3 Study Context: United Arab Emirates

The United Arab Emirates—founded in 1971—is amongst the world’s most developed countries, notably known for its achievement of increasing its GDP from 6.5 billion Dirhams (£1.3 billion) in 1971 to 1.5 trillion Dirhams (£310 billion) in 2014 (WAM, 2015). Beyond economic development, the UAE’s focus on educating both men and women was reflected in the increase of literacy rates from 54% in 1975 to nearly 95% for both genders in 2014 (UAE Embassy, 2017).

The UAE is made up of seven ‘emirates’ (equivalent to England’s regions), where each acts as a constitutional monarchy with its own appointed ruler, and is united under a provisional constitution that specifies the powers allocated to each new national institution (UAE Interact, 2015). The seven emirates are Abu Dhabi, Dubai, Sharjah, Ajman, Um al-Quwain, Ras al-Khaimah, and Fujairah. Abu Dhabi is the capital of the UAE, and a citizen of

the country is normally referred to as an 'Emirati'. The rapid growth of the economy has created a situation of massive influx of foreign workers, and as a result, Emirati citizens make up only 16% of the total population (Al Qassemi, 2013).

With an international population, the education system in the UAE is continuously growing to cater for a diverse student body through more than 16 different curricula (MOE, 2012). The next section begins by exploring the historical, political, and cultural context of the UAE to offer a broad understanding of decision-making in the country. It then follows with an in-depth context of the UAE's educational system, and concludes with policy challenges.

All the emirates have an identical governing structure and division of responsibilities for education. Figure 1.1 below illustrates a governance structure that appears to be linear and clear in terms of how the responsibilities are divided, however, the situation is far more complex than that. When it comes to the development of Arabic language policies and curriculum—the context of this study—the Office of Education Policy within the MOE is the key player. Arabic is a national curriculum subject, meaning that the development of the subject and its policies is centrally within the MOE. However, there is still a lack of clarity over the decision-making process in education at both the local and national levels. Particularly, there is confusion over who is responsible for decisions related to policy and curriculum even if it seems that it is taken by influential figures occupying key positions, including civil servants within the MOE (Shaw *et al.*, 1995). According to Lootah (2011) "In Arab countries the existence of civil society is formal, fragile, and excluded from the process of decision-making" (p. 47). The issue of clarity when it comes to the decision-making process is, as will be shown, aided by the absence of publicly shared data that clarifies who is responsible for what.

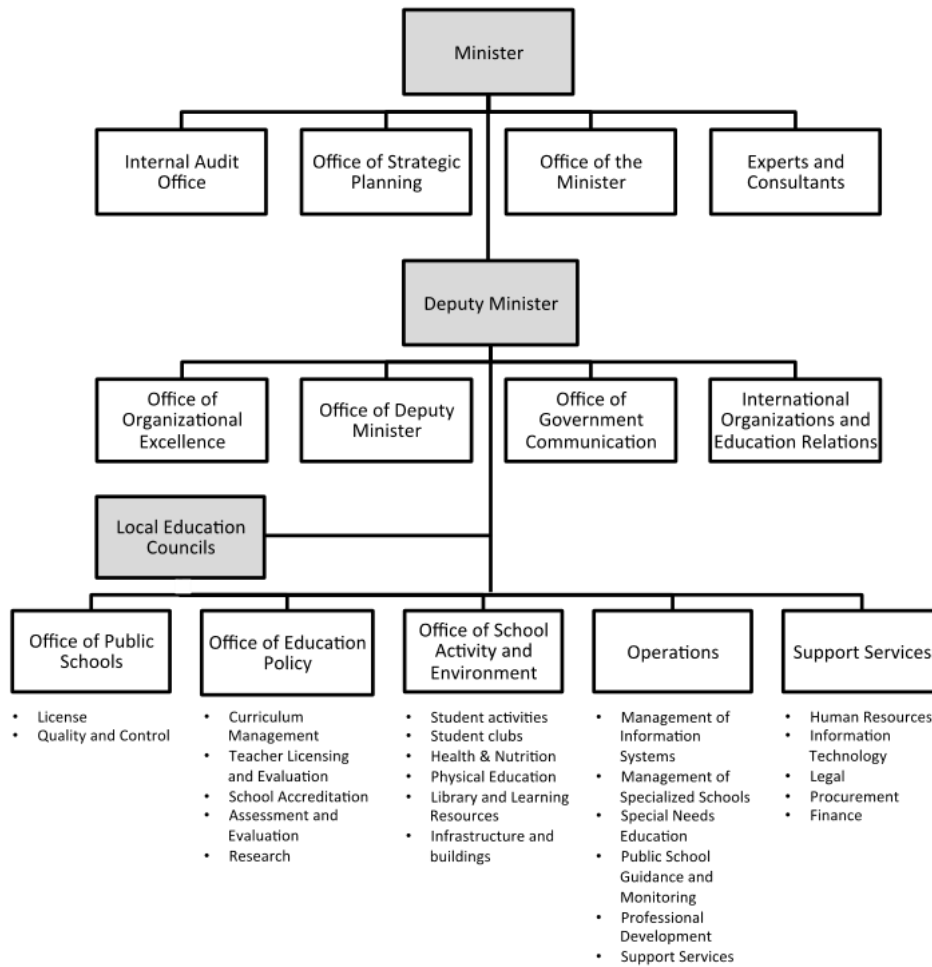


Figure 1.1 Organisational Structure of Ministry of Education (MOE, 2015a)

1.3.1 Forming the UAE’s educational system

The history of education in the region is better understood under the umbrella of four main school types that emerged in phases before the development of the country. These school types are an illustration of pre- and post-formal educational systems in the Gulf region. The first type is religious schools, where mosques were responsible for the teaching of literacy (Davidson, 2008; Ridge, 2011). Religious schools were considered the earliest form of state-funded education in the area of the Arabian Gulf. The second form of schooling was known as learning circles and consisted of student groups that were taught and mentored by scientists and experts, locally or regionally

(MOE, 2015a). The third type of schooling development in the region was semi-formal, both private- and state-funded schools, which were present before the formation of the UAE. Semi-formal school refers to schools purposefully constructed for learning, which are, however, seen to be less organised than formal schooling.

Semi-formal schools began forming between the years 1907 and 1953 with the increase of trade, as merchant families became wealthier and began to develop better schools for their children (Ridge, 2011). The years between 1953 and 1971 witnessed the formation of state-funded formal education across the region. These schools were formed with support from educational missions from neighbouring countries and states including Saudi Arabia, Egypt, Bahrain, and Qatar (Ridge, 2011). The first formal state-funded school was initiated in 1953 by an educational mission from Kuwait, and opened in the Emirate of Sharjah (Ridge, 2011). Formal schooling was characterised by schools that had organised curriculum, evaluation, and grade levels (MOE, 2015a). Additionally, formal schools were able to issue diplomas and certificates at the end of the academic year recording student qualifications officially.

The accounts of input from experts in neighbouring countries demonstrate knowledge mobilisation in the development of the UAE's educational system. Specifically, the UAE was learning from the experience of systems that had a more developed educational system at the time. The educational missions from neighbouring countries brought with them not only curriculum knowledge, but policies and methods of teaching too. Usually, the countries that supported forming these schools were responsible for staffing them, as well as providing texts and curricula (Davidson, 2008). Consequently, the schools that were formed in these years were not systematically aligned in

terms of matching curriculum or operation, and thus presented a fragmented local educational model.

After the creation of the federation in 1972, the UAE established the Ministry of Education that began to combine and manage the 47 schools that previously existed (Ridge, 2011). The founding father president Shaikh Zayed bin Sultan Al Nahyan announced Article 17 of the National Constitution that states, “Education shall be a fundamental factor for the progress of society. It shall be compulsory in its primary stage and free of charge at all stages, within the Union” (Lootah, 2011).

The plan to form a national curriculum was only launched in 1979 by the Ministry of Education, and was not applied until 1985. According to Findlow (2005), the greatest influence on the development and structure of the UAE national curriculum was the Egyptian model of education. The main reason behind the adoption on the Egyptian model was the high number of Egyptian teachers employed in the UAE in the early years, and the Egyptian advisors who worked closely with the leaders of each Emirate (Findlow, 2005). As a result, the original national curriculum and policies in 1985 reflected the curriculum and policy of Egypt at the time, which adopted a rote-learning model of teaching (Ridge, 2011). Through the years, the national curriculum underwent constant efforts of re-modernisation for alignment with the country’s economic and developmental visions. In the Ministry of Education 2010–2020 Strategy, the development of the national curriculum is set at the forefront with a focus on developing innovative curriculum and teaching methods, and equipping students with necessary life skills (MOE, 2012). A key aspect of the ministry’s effort to provide a modern curriculum is the emphasis on critical thinking and problem-solving skills, and away from the memorisation approach earlier adopted (Ridge, 2011).

Today, the UAE's educational system caters to a diverse international student body with 17 different curricula in private schools, as well as the UAE's national curriculum (MOE, 2012). The schooling system is divided into four stages: kindergarten (age 4–5), elementary (age 6–11), intermediate (age 12–14), and secondary (age 15–17). Education is seen as a public service with free provision available to all UAE nationals from primary and secondary levels through all higher education stages in national institutions (MOE, 2012). The public state-funded schooling system follows the national curriculum, which is established by the Minister of Education and caters for 61% of students in the country, while the other 39% is catered for by private schooling (MOE, 2014). Public schools adopt the UAE national curriculum that includes Arabic, Islamic Studies, Civic Studies, Maths, and Sciences from primary through secondary. Public schooling initially catered for only Emirati nationals, however, in 2007 the MOE announced its new policy of allowing Arab resident expats to join public schools for a minimal fee. The policy also lists admission requirements for admitting expat residents that include achievement in previous grades, space availability, and capping admission at 20% of the total school population.

Statistics collected by MOE (2014), (see Table 1.2) show the total number of students in public schooling was 288,794 with 100% being UAE nationals. Since the national curriculum is largely delivered in the Arabic language, which is the case for all subjects except English, Science, and Mathematics, public schools do not cater for non-Arabic language speakers yet. In 2019, there were 1,190 schools operating across the country, mainly public schools. Private schools on the other hand have a total of 810,537 students, with UAE nationals being 16% of the private school student population.

Emirate	Schools		Total
	Public Schools	Private Schools	
Abu Dhabi	138,421	241,102	379,523
Dubai	29,387	280,979	310,366
Sharjah	42,143	183,592	225,735
Ajman	16,493	54,776	71,269
Um al-Quwain	5,456	6,790	12,246
Ras al-Khaimah	32,745	27,493	60,238
Fujairah	24,149	15,805	39,954
Total	288,794	810,537	1,099,331

Table 1.2 Distribution of students in the UAE by school type and Emirate(MOE, 2019)

There are currently 643 private schools in the UAE, where these schools distinguish themselves through providing international curricula, and instruction in foreign languages. These include British, American, Indian, Philippine, French, and international baccalaureate (IB) amongst others (KHDA, 2014). While private schools are free to apply the approved curriculum of their choice, the MOE mandates that all private schools must teach Arabic, Islamic Studies, and Civic Studies to their Arabic speaking students in accordance with the national curriculum (MOE, 2012).

1.3.2 Governance of education in the UAE

The provision and governance of education in the UAE sits within a web of national and local government bodies. On the national level, the Ministry of Education (MOE) is the main governing body, and an umbrella to the local Educational Zones (see Figure 1.1). The MOE is responsible for the development of the national curriculum, developing educational policies, overseeing assessment and examination, regulating private schools, and the delivery of public education in all the Emirates. The MOE is also responsible

for developing the vision of the overall educational system. While the MOE is involved in the delivery of education in all emirates, the delivery is operationalized through the Educational Zones which are the local bodies in each of these emirates responsible for providing and overseeing public education in their zone, as well as creating initiatives to improve quality and standards.

According to the organisational structure in Figure 1.1, potential sources of knowledge mobilisation and collaborative learning within the MOE can be: experts and consultants, international organisations who are in charge of international assessments, and the research department under the Office of Education Policy. However, the MOE does not provide publicly shared information of the workings of each department. Yet, according to the organisational structure, it seems that potential sources of learning do exist in the formal setting of the organisation. The question remains to what extent is learning and knowledge mobilisation integrated within MOE practice, if at all.

This study provides first hand data that explores learning in one policy community within the MOE. While the community is specific and data may not be generalisable, the empirical data this research study collects can be relevant in policy communities that share similar contextual features (for instance, policy communities that have formed within the MOE to address other specific challenge e.g. Science curriculum or English). Also, the data can be considered cross-sectoral, where implications of learning in a policy setting in curriculum can provide insights to learning in policy settings within health, social policy, etc.

I argue that when policymaking is faced by uncertainty, collaborative models for learning are formed to address these challenges. This is the case regardless of the sector in which the policy community is found. According to

Rittel and Webber (1973), governments form network structures to treat seemingly intractable public policy problems, so-called “wicked issues”, through forms of managerial response by collaboration and partnership (Williams, 2002). I focus in my argument, however, on the explicit decision by policymakers in government to create structures for problem-solving, and not the spontaneous formation of networks by government actors. The research presented within this thesis explores a specific instance where MOE set up a policy network to address the ongoing issue of Arabic language curriculum policymaking in the UAE. To provide background information, I explore the challenges surrounding Arabic language policymaking in the UAE, and discuss how learning can support policymakers in addressing these challenges more effectively.

1.3.3 Curriculum policymaking in MOE

Figure 1.2 provides the organisational structure of the curriculum department in the UAE’s MOE to better understand the curriculum development function within. While the development of national curriculum policies is an activity strictly taking place at the national level (within the ministry), the local emirate-level “Educational Zones” play the bigger role in the implementation phase and support rather than the development of these policies. However, when it comes to the development of policies, it is central to the civil servants within MOE, with no need for representatives from all the seven emirates (MOE, 2015a).

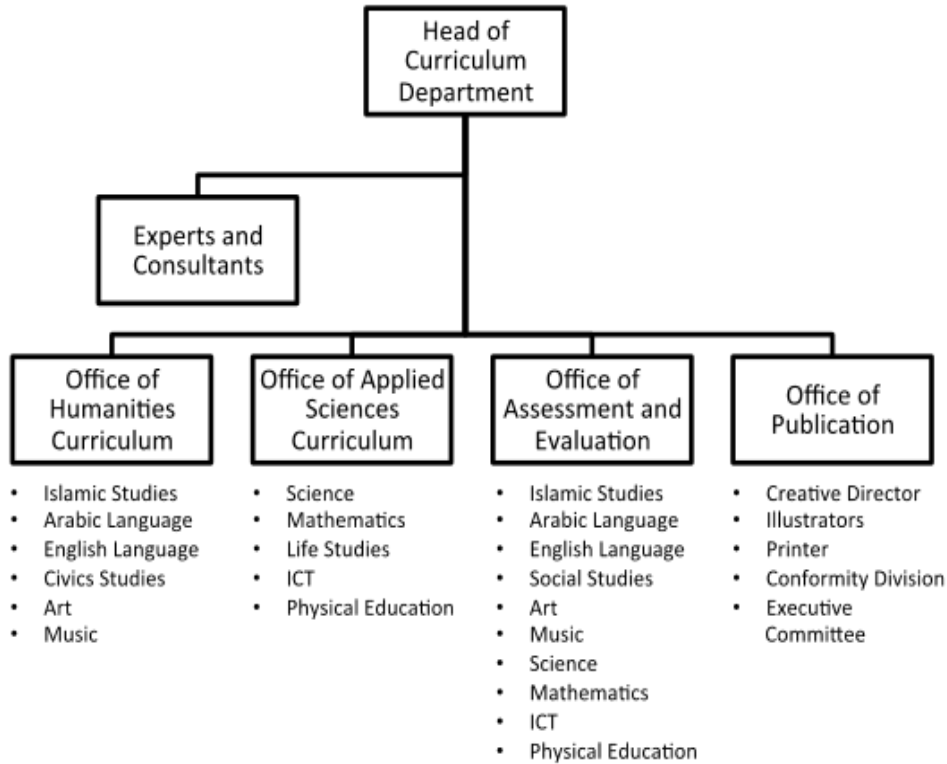


Figure 1.2 MOE curriculum department organisational structure (MOE, 2015b)

While the ministry coordinates curriculum development, it also invites external subject experts from local universities to contribute to the development process through working policy communities. The main contribution of these working communities is seen through the joint work on setting the policies for curriculum content and assessment. The MOE’s curriculum department has a threefold role. First, the MOE is responsible for providing curriculum policies—guidelines in line with the government’s strategic plan. Second, the curriculum department approves textbook manuscripts and reviews them every five years. Third, the department is responsible for preparing assessment and examination for all of the national curriculum subjects which includes mid-terms and end of year exams (Farah and Ridge, 2009). The assessment and evaluation office covers both public and private schooling. All private schools have to adhere to the required three subjects of the national curriculum (Arabic, Islamic Studies, and Social Studies), which are assessed and evaluated

through the ministry through annual, end of year, large-scale assessments administrated within each private school independently.

The curriculum development process begins with the national committee on curriculum development that is housed at the curriculum department in MOE (see figure 1.2). The committee develops a vision for the curriculum and creates what it refers to as a policy community for each subject that is taught at school (Gaad *et al.*, 2006). According to Gaad *et al.* (2006), the curriculum policy community includes university academics, teachers from that subject area, subject supervisors, and one non-academic subject specialist. Within these communities, collaboration and sharing of learning between participating actors takes place, thus providing a source of learning that can potentially enhance the curriculum policymaking process.

The information generated from these policy communities is approved by subject experts involved, and then passed to the undersecretary of curriculum who oversees the development of policies, textbooks, and teacher guides for all the courses. According to the head of curriculum at the Ministry of Education (ECSSR, 2011), this process of curriculum development is continuously updated as an on-going activity. Some updates happen annually, and others happen on a quarterly basis. After the textbooks and curriculum are distributed, subject supervisors within schools periodically monitor classrooms to observe the quality of the curriculum and report the findings to the secretary's office (Gaad *et al.*, 2006).

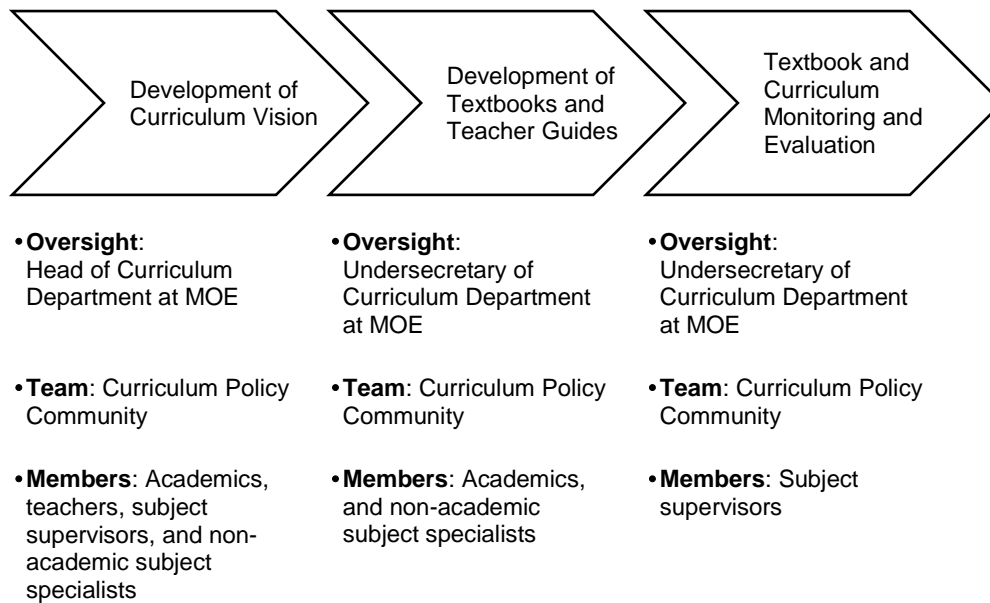


Figure 1.3 Curriculum development process in the Ministry of Education in the UAE (synthesised from Gaad et al., 2006)

While the literature available on curriculum development and policy process in the UAE is limited, a pattern of challenges that the process encounters was found by Farah and Ridge (2009). Amongst these main challenges are two: a) how curriculum policy is interpreted; and b) the lack of overarching curriculum document. The role that the MOE plays as curriculum developer is highly focused on the development of a product (the textbook); this can be seen through the works and process of the curriculum department seen in the flow chart in Figure 1.3. According to Farah and Ridge (2009), “the curriculum must be conceptualized in holistic terms as more than just what should be taught but also as how it is being taught and assessed” (p. 227). This holistic approach to curriculum that Farah and Ridge (2009) call for takes curriculum from being merely a textbook to viewing curriculum as a set of standards aided by lesson plans, pedagogy, assessment, and evaluation. In order to support a holistic approach, curriculum policymakers must have the capacity and knowledge to follow such an approach.

Progress has been happening in this area since the Farah and Ridge (2009) paper was published, and as of 2018, the MOE has shared an overarching curriculum document for all the national curriculum subjects. Consequently, the department of curriculum at the MOE is now involved in the development of subject standards after developing the vision (as seen in Figure 1.2). As these changes took place recently, thus it is not clear yet how pedagogy and assessment are aligned with the curriculum standards documents, or if the gap between teachers and their understanding of curriculum goals or vision is still present.

1.3.4 Why focus on exploring UAE Arabic language Curriculum policymakers?

Over the many years, the issue of Arab students underperforming in Arabic language throughout primary to secondary schooling in the UAE and failing to have the necessarily written and spoken skills, is continuously highlighted (Pennington, 2015b). More recently, it was reported that Arabic is at risk of becoming a foreign language in the UAE (Pennington, 2015b). Realising this specific challenge, the MOE's 2015–2021 plan focuses on developing students' Arabic language skills as the first goal towards achieving its vision (MOE, 2015c). The plan indicates the need to rethink the Arabic language curriculum and pedagogy. The case of the UAE as an Arab country with an international population and formal bilingual education in state-funded schools creates an innovative environment to conduct research on first language curriculum development and policies.

In 2013, the Federal National Council (FNC) announced the widespread nature of poor Arabic literacy skills amongst the children of the UAE according to internally collected information. Hundreds of children are unable to read or

write Arabic making this challenge the “new disability” (Salem, 2013). Children in the UAE today are more likely to have superior English reading and writing skills in comparison to Arabic language. Since 2013, the issue of Arabic literacy amongst school children has remained in spotlight with recurring media and public conversations calling for quick and reactive decision-making from the MOE to address the problem. The curriculum development challenges the UAE faces have prompted the rise of the Arabic language illiteracy dilemma. Efforts to enhance Arabic literacy skills by MOE may be seen to contradict their reforms towards an international competitive, 21st century skills. However, the MOE’s 2010-2020 strategy promotes bilingualism in the future plans for education reform, where a focus on advancing students’ skills in both Arabic and English language is discussed.

With these challenges in mind, the UAE has recently affirmed that Arabic is the language of all its national establishments, and has listed Arabic skill development as a core and top priority in its Ministry of Education vision (Gallagher, 2011). Currently, Arabic language in schools is not given the focus required to improve student development with low allocation time. In addition, the quality of human resources and educational materials in Arabic are not on a level with the courses in English, making it difficult to improve and innovate (Al Farra, 2011). The director of the curriculum department at the MOE has voiced that the Ministry is keen to develop Arabic language and has taken on the challenge (ECSSR, 2011). Consequently, the MOE has begun working on a development document for Arabic language that includes a framework with reference to skill accumulation from primary to secondary grade students (UK Years 1 to 11). The document lists performance standards and indicators in an attempt to build cohesion between all the parties involved in the education process through acting as a knowledge base (ECSSR, 2011).

The policy literature identifies that learning between policy actors, and the creation of policy networks in policymaking is sought when problematic and 'wicked' policy areas emerge (Rittel and Webber, 1973). In the case of the Arabic language curriculum, the multi-dimensional challenges surrounding policymakers involved in setting the policies makes it imperative that MOE is involved in seeking forms of collaborative learning, or policy networks. As such, the formation of the Arabic language curriculum policy community by MOE provides potential impact where the challenges mentioned earlier can be addressed. For instance, these policy communities can foster a practice of policy and curriculum evaluation by engaging external researchers to do so. Similarly, the policy community can support increasing local capacities in policy and curriculum by facilitating opportunities for UAE nationals to engage with foreign experts in learning processes.

1.4 Structure of thesis

The thesis is structured into six chapters: Introduction, Literature Review and Theoretical Framework, Methodology, Findings, Discussion, and Conclusion. In the first chapter, I set the stage for the research and define key concepts. The second chapter is the literature review, which attempts to explore the emerging concept of Policy Learning Communities (PoliLCs). The chapter concludes by developing the theoretical framework for the concept of PoliLCs, and presents the research questions.

Chapter three focuses on my choice of methodology and methods. It begins with identifying the research aims and objectives, along with arguing for my epistemological and ontological stances. Chapter four presents the findings of the interviews and SNA survey thematically. The sample of the study was 20 policy actors, of which 19 filled the SNA survey that collected data on who they

interact with, and demographic information. Seven actors from the sample PoliLCs were interviewed over the phone.

In the discussion chapter, findings from the earlier chapter are linked to theories in the literature review. The discussion chapter is arranged thematically following a similar pattern to the findings chapters. The research findings were identified to align with the propositions that the theoretical framework of this thesis presented.

Chapter six concludes with a summary of the findings, where PoliLCs is explored as a concept that can enhance individual capacities for learning in policymaking. The conclusion also discusses implications of the study for policymakers, practitioners, and researchers in the field of education policymaking, and suggestions for further research.

2 Literature Review

The purpose of this review is to enhance current understanding and identify theoretical groundings for the emerging concept of Policy Learning Communities (PoliLCs). This will be achieved through critically and systematically engaging with the works of Stoll (2008) and Brown (2013) which are the leading works proposing the theorisation of PoliLCs. Stoll's (2008) work fundamentally attempts to transfer knowledge and experience of Professional Learning Communities (PLCs) into a policy setting by viewing it as "means to build learning in order to support educational improvement" (2008, p.107). While the literature on PoliLCs currently lacks empirical support and data, it provides an exploratory foundation of a potential framework for understanding and exploring learning in policymaking. Brown (2013), on the other hand, builds on Stoll's theorisation of PoliLCs as a capacity development tool by conceptualising it as an "optimal approach to facilitating knowledge adoption" (p.131).

The review will begin with a historic literature overview of public policy and learning in policy literature. In doing so, I shed the light on how learning and public policy as a science have gained monument and importance in both literature and western government practices. I then introduce alternative models of collaborative learning to explore PoliLCs, and understand how existing models can help shape the framework further. I conclude the literature review by arguing and supporting the concept of PoliLCs as a potential exploratory framework for learning in policymaking.

By learning, I refer to the process of actors in the policy process, individually and collectively, updating their beliefs and decisions on the basis of evidence and new information. The process I refer to is done through purposeful social

interactions, where policy actors engage in knowledge mobilisation to improve policy (Newig, *et al.*, 2016). Knowledge mobilisation refers to the flow of knowledge and information between participants in a learning community (Levin, 2004).

In critically engaging with alternative models, I argue how PoliLCs is a novice concept with potential exploratory authority that sheds a light on learning and knowledge mobilisation in policymaking. Before starting the review however, I describe first the process I undertook in conducting this literature review.

Literature review methodology

I began the literature review search guided with one central question: how can research be utilised to inform education policy? With the exposure to PoliLCs, I built an early understanding that the concept involves multiple disciplines and literature areas. The initial readings of Brown's (2013) *Making Evidence Matter* and Stoll's (2007) *Professional Learning Communities*, introduced me to two key concepts; Policy Learning Communities, and Professional Learning Communities. Consequently, these concepts allowed me to widen my theoretical space by adopting an interdisciplinary approach of learning from multiple bodies of literature, while focusing on the singular question or issue of how policymakers use and can best utilise research. The initial readings familiarised me with emerging themes and key authors surrounding the concept of PoliLCs. Hence, I was able to begin identifying keywords to use for further research.

Initially, my keywords were the following: learning, learning communities, policy learning, policy process, policy formulation, professional learning

communities, communities of practice, collective learning, policy and research, evidence-informed policy, and policy networks. My initial readings widened my theoretical boundary beyond policy where I undertook a further keyword search that focused on the following concepts: social capital, social capital and learning, learning theories, social learning, and organizational learning.

The next step taken after determining the keywords was deciding on a systematic research strategy. To develop a research strategy, I considered four planning points: an inclusion criterion, a search strategy, a screening approach, and a synthesis strategy. The inclusion criteria referred to the choice of boundaries that determined which research studies would be included in the literature review. These boundaries were determined by topic, source, method, or date (Gough, Oliver, and Thomas, 2012). Studies and literature were included if they met the following criteria:

- The literature covered central theories and perspectives in the areas of the keywords chosen
- The literature was relevant to the research question
- The literature reviewed and engaged critically with previous works in the area of research interest
- The literature was published in peer-reviewed journals in the past 30 years
- The literature was written in English

After determining the criteria to include or exclude literature, I began developing my search strategy to assist me in systematically identifying relevant material. First, it was important to classify the literature into two formats: printed, and digital. The printed literature was mainly in the form of books or official public documents. For the printed literature, I began as

discussed above with two initial books that then led me to other books and peer-reviewed articles. I then decided to find generic books that covered a large number of literatures by using policy process and social network analysis as keywords in an online library book search. This led me to the identification of the following titles: *The Oxford Handbook of Public Policy* (Moran *et al.*, 2006), *Theories of the Policy Process* (Sabatier, 1999), *Social Network Theory and Educational Change* (Daly, 2010). The reference pages in these books were useful in providing direction to central authors and published works.

An essential element in my search was the choice of digital search tools to use. Mainly, to search for scientific journal articles cited in previous readings or conduct a new keyword search, the following research engines were used: Google Scholar, Scopus database, and JSTOR's digital library. Each of these databases and search engines allowed me to find relevant articles, while suggesting a list of other articles are doing research in the same area. This was extremely helpful as it allowed me to find recent discussions related to the literature that I found useful and relevant.

After the texts were collected, the literature was screened against the search criteria and a digital record of these sources was kept. This was followed by developing a concept map of the literature review that focused on grouping concepts, and linking important theories and authors with these concepts (see figure 2.1 below). The concept map is informed by the initial readings and claims that currently exist in the literature on PoliLCs.

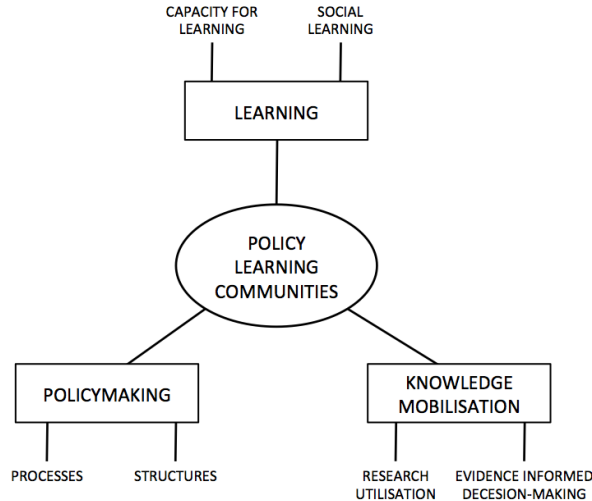


Figure 2.1 Initial concept map used in this thesis to research the literature

Notes and summaries of individual sources were also made at this stage to help in organizing thoughts, and plotting a storyline. The concept map also assisted me in identifying when a saturation point in the research literature review strategy was reached. A saturation point refers to the situation when no new relevant articles come to light (Bowen, 2008). Within screening, a cyclical process was followed, beginning with checking the reference lists of the screened literature, identifying new literature, screening the new literature, checking the specific reference list, and repeating the process over until no new relevant articles emerged. After screening, the summary and notes of the relevant literature were coded thematically under the following headings: policy processes, policy networks, and learning communities. Initially, the literature review structure followed the order of these headings. However, after a round of developing the theoretical framework for this research, a choice has been made to restructure the literature review according to a conceptual narrative instead of a thematic-ordered discussion.

To achieve a better structured literature review there is a need for a clear synthesizing strategy. Synthesizing the literature is essential for allowing a

systematic method in which “studies are compared, contrasted, and subdivided; and their findings are configured” (Gough, Oliver, and Thomas, 2012, p. 184). As a synthesizing strategy, I adopt a conceptual narrative approach where concepts from multiple literature areas such as policy, education, and sociology have been brought together coherently to further understand my research question and its empirical grounding. Not only does this approach allow for a wider discussion of main theories and their analysis, but allows my study of literature to develop stronger arguments and hypotheses. As a result of this integrative review, a theoretical framework on PoliLCs can be conceptualised to ground the new understanding.

2.1 Public Policy as a Research Area

In the 1950s, early attempts of defining and proposing policy science as a research area were discussed by Harold Lasswell, a leading American political scientist. Lasswell focused on the adoption of rigorous application of science to policy-related issues within government. Policy science in Lasswell’s (1951) working definition is concerned with the “knowledge of and in the decision process of the public and civic order” (p.1). While much of Lasswell’s work was informed by the context of American public policy, it remains one of the fundamental contributions to the study of public policy. Policy science literature is limited in the Arab world, and research is constrained mainly to universities, where it is mostly undertaken by foreign professors working beyond the Arab world (Arvanitis *et al.* 2010). This is true in the case of the United Arab Emirates, where social and policy research remain limited (Lootah, 2011). Despite the UAE government’s commitment towards a knowledge-based future, the role of research in and on public policymaking remains unclear.

Therefore, there is a need to draw from policy knowledge developed within a western context and rethink its implication in the Arab context. Specifically, knowledge on approaching decision-making through the use of a scientific approach to address policy shortcomings that impact the lives of people. Doing so is important in the current shortage of policy literature conducted in the Arab region. Drawing from international literature can serve as a knowledge foundation for future research in the region and supplement the current gap of policy literature in the Arab world.

The field of policy research emerged initially in democratic countries during the 1960s as governments sought social science knowledge to develop public policies (Rizvi and Lingard, 2010). The years following witnessed efforts to create more analytical approaches to support policy in the US, such as the use of research to support war efforts during the Second World War, and the Vietnam War (Rizvi and Lingard, 2010)

The continued involvement of the US government in policy analysis is an illustration of the American government realising the potential benefit that social science has in addressing public policy problems. The practice of policy analysis or use of social science in the Arab world remains very limited, and the assessment of policy using scientific methodologies is not a prominent practice (Lootah, 2011). The adoption of an analytical approach to policymaking in democratic countries, as seen in the case of the US, provides insight into how it can enhance the policymaking process when engaged with. As social science and research practices are limited in the context of this study, awareness of its usefulness to policymakers must be established first. Policymakers are more likely to find social science useful in their decision-making process when they can witness its benefit on their policymaking

practices. For policymakers to witness the benefit of research to their practice, efforts to engage with research closely is necessary.

The development of public policy as a field in the 1960s introduced not only the application of scientific methods to policy inquiry, but also the development of interest in learning within public policy. Learning can provide rationale for policy, and an exploration of learning is useful in providing lessons for the government to facilitate change more effectively (Freeman, 2006). Fundamentally, learning and policy science intertwine, and together, are able to provide answers to policymakers when critical policy questions arise that require data, evidence, and voices from experts to address effectively.

In the same period that policy science developed, the topic of how governments learn in the west became an explicit area of research (Freeman, 2006). Mainly, the interest in government learning grew relative to the growing sense of uncertainty about government choices and decisions (Lasswell, 1951). During that period, most industrial advanced countries had large welfare programs facing similar problems in financing and management (Freeman, 2006). The emergence of common public problems created opportunities for governments to learn from one another. Consequently, research interest in government learning developed and began to gain momentum as seen in the works of Donald Schön's (1971) *Government as learning systems*, and Hugh Heclo's (1974) *Political learning*.

The early literature on learning in government as seen in the works mentioned above formulated the original construct of what is known as policy learning today. The focus of these early conceptualisations is the need for governments to utilise learning as a mechanism for problem solving. In this sense, learning is viewed as a tool to address uncertainty as it could provide

the subjective grounding that policymakers often seek to support their policies. As a result, public policy in the past decades witnessed a shift towards more use of research and data as learning mechanisms for decision-making (Hannaway and Mittleman, 2011).

The UAE government in recent years has shown growing interests and efforts in seeking learning from other governments (WGS, 2017). One example of these efforts is the annual World Government Summit (WGS) hosted by the UAE government annually in Dubai since its conception in 2013. The purpose of the summit is to provide a platform for world governments to exchange learning across various public policy areas, to help face future challenges (WGS, 2017). Another practical example of the UAE's government's engagement with policy learning can be seen in the UAE's educational system reform since the country's formation. In the past forty years, the UAE have witnessed trends of learning from local, regional, and international governments (Warnica, 2011). Yet, much of this learning has taken the form of model transfer where policies or programs that worked in other places have been copied without regards to the local context.

The increasing availability of information about outcomes and performance of policy systems today provides a greater opportunity for policymakers to find policy learning sources. However, learning in government requires modes and methods of integrating learning practices in a continuous mechanism as Schön (1971) argues. To integrate learning, an understanding of the policy processes, as well as how and why policymakers learn is necessary. The literature on policy processes and learning as discussed at the beginning of this section is more prominent in the western world. The lack of policy research in the UAE will be complemented with lessons from the wider policy literature. Specifically,

the literature review will develop towards a conceptual framework that will guide this study's empirical exploration of policy learning in the UAE.

2.1.1 Defining Policy

Across the literature, multiple definitions emerge to define and explain the policy process. However, many of these definitions share similar perspectives on how they choose to define policy. Policy is commonly defined as: a choice of action (Dye, 1992; Haddad and Demsky, 1995); a goal-oriented plan (Jenkins, 1978; Lasswell and Kaplan, 1970); or a text document (Birkland, 2011; Ball, 2006). For the purpose of this thesis, drawing on these perspectives, I define *policy* as:

A government initiated and interrelated set of decisions where single or group choices set out the directives that guide future decisions, and further the government's common interest (Dye, 1992; Jenkins, 1978; Haddad and Demsky, 1995; and Bogdanor, 1987).

The focus of this thesis is specifically education policy. Education policy is defined by the OECD as the policies made in relation to "educational practices, and how governments address the production and delivery of education in a given system" (Vinnert and Pont, 2017, p. 19). Identifying the common overarching policy definitions provides a conceptual lens through which the policy context of this study can be better understood, especially as there is a shortage of research on policy and policy process in the Arab context.

While policy can be defined through multiple lenses and perspectives, identifying a definition that is relevant to the practices of policymaking in the UAE is needed for this exploratory research. Specifically, the definitions explored were not descriptive enough to be able to create a generalised

understanding of policy as seen in Dye (1992) and Ball (2006). What is consistent between definitions, however, is that policy is a government choice that guides future action. I extend the interpretation of government choice to be more of policy as a direct choice of those individuals within the government who hold power or responsibility to make these choices. These choices and the ensuing policy eventually become an outcome of a struggle in government over who gets what (Cochran, 1999). From the three perspectives defining policy, the perspective that does hit the mark is most closely tied to the topic of the research, the factors and conditions influencing how policy actors may continuously engage in learning, is viewing policy as a goal-oriented plan. Specifically, viewing policy as a plan and process presents a structure and opportunity for policymakers' interactions, which as a result enhance opportunities for social learning to be present.

2.1.2 Learning in policy literature

When policy literature addresses learning, the concept of 'policy-learning' is often highlighted to explain the practice of learning from past policy. Policy learning, also described as policy-oriented or instrumental learning, is learning that emerges as policymakers seek to build policy understandings that are "concerned with the attainment (or revision) of policy objectives" (Sabatier, 1988, p. 133). Associating learning with past policy makes policy success or failure the central stimulus behind learning the policy process. Existing literature focused largely on learning from policy successes and good practices, than learning from failure (Dunlop, 2017). Public officials may fail to learn from valuable lessons on failing experiences, where studies on policy failure marked how rarely failure is followed by learning (Bovens and Hart, 2016). Consequently, governmental learning may only consist of

acknowledging that a certain policy or tool were unsuccessful without going to explore the causes more closely. Instrumental learning is therefore partial, and needs to be taken a step further by engaging with learning more thoroughly to support policymaking.

The nature of the policymaking process from structure to interaction provides various opportunities for formal social learning to manifest. Specifically, the interactive nature of policymaking, which involves policymakers working with one another. The earliest discussion of social learning in policy through dialogue and feedback is found in the work of Hecló (1974). The collaborative nature of policy learning, specifically the interactions that take place amongst policymakers, is capable of changing the decision-making behaviour of policy individuals. In the policy realm, social learning entails exploring policy problems through interaction, and hence, requires a high degree of collaboration where actors come together to critically engage with knowledge and learning. These forms of interactions between actors amplify and develop new knowledge, and can, in its most influential form, connect the new knowledge with prior knowledge in new ways (Nonaka, 1994).

Social learning is transferrable to the context of the UAE, especially as policy processes revolve around the engagement of multiple actors with one another. Consequently, the interactive nature of policymaking creates an opportunity for this study to identify how formal learning, at the both individual and collective level, can be better used to support more holistic policymaking.

In this study, I adopt a holistic approach when defining learning and move beyond the association of learning with policy failure. Instead, I refer to learning as the process of reflexively updating beliefs on the basis of evidence, experience and new information through the process of social interaction

(Newig *et al.*, 2016). The perspective I adopt towards learning is focused on acquiring new information from evidence. According to a statement by the Cabinet Office of the UK (1999), evidence for policymaking is made up essentially of information; however, good information is derived from multiple resources such as:

Expert knowledge; existing domestic and international research; existing statistics; stakeholder consultation; evaluation of previous policies; new research, if appropriate; or secondary sources, including the internet. Evidence can also include analysis of the outcome of consultation, costing of policy options and the results of economic or statistical modelling. (Cabinet Office, 1999, paragraphs 7.1 and 7.22)

When reference to learning in the policymaking process is mentioned in this study, I am referring specifically to learning from one or more source of information under the umbrella of evidence. Exploring the policy process is critical to understand how and where in the policy process learning from evidence can take place. Specifically, how can the learning of actors in the policy process be supported in efforts to support public problem solving?

2.1.3 Linear and non-linear policy processes as exploratory tools

The policy process in the wider literature is the method by which public policy is initiated, implemented, and evaluated. While there is no one universal model representing policy processes, a common feature of the process is that it involves the interaction of actors in a systematic, multiple stage process. The multiple stages or steps include agenda setting, policy formulation, implementation, and evaluation (Jones, 1970; Burstein, 1991; Dye, 1992). Each of these stages is dealt with by the actors within the process as separate process that builds toward achieving the policymakers' goals (Jones, 1970). The step-by-step perspective of policy formulation resembles what is known as the linear model of policymaking. The policy literature recognises that

policymaking is systematic rather than random, and that it is goal-oriented, complex, and coordinates several courses of action (Harman, 1984). While policymaking processes may follow similar stages in public governments across the world, they differ in terms of complexity, scope, decision environment, range of choices, and decision criteria (Haddad and Demsky, 1995).

The linear and sequential approach to the policymaking process is often seen as a natural outcome of bureaucratic structures that value linear policy models (Bell and Stevenson, 2006). Specifically, the bureaucratic nature of public governance creates a structure for a linear policymaking process to exist. In the case of governance in the Arab world, bureaucratic systems were an outcome of public policy developmental efforts to maintain law and order (Jabbara, 1989). With the lack of a robust empirical evidence base exploring policymaking in the Arab world, the theoretical framework of a linear policy process provides a conceptual base to understand policy practices in organisations that have not been explored previously (Birkland, 2011). While the linear model allows for a clearer approach to knowledge utilisation through its specific stages, the model does not guarantee successful utilisation of research or learning.

In contrast, the literature recognises that policymaking is more messy than systematic, challenging assumptions of linearity in policy processes within bureaucratic organisations (Campbell *et al.*, 2007). The most well-known theoretical discussion on the messy process of policymaking was offered by Cohen *et al.* (1972) through the garbage can model. The garbage can model sees decisions as “an outcome or interpretation of several relatively independent streams within an organization” (p. 3). The model is seen to

manifest when there is: a failure amongst political actors in defining goals, a lack of understanding of the policy process, and a fluid involvement of participants (Cohen *et al.*, 1972). The garbage can model assumes that in the absence of a linear decision-making process, public problem solving happens as a result of interaction between problems, solutions, participants, and opportunities to make decisions. Through the (messy) interaction between these multiple actors, policymakers engage with learning as a process to seek knowledge and evidence for problem solving (Kingdon, 1995). The garbage can model is argued to be applicable to organisational structures that are often described as having a poor decision-making process (Cohen *et al.*, 1972). Yet, the bureaucratic aspect of public policy assumes that governments are more likely to have some sort of a systematic decision-making process, rather than a non-linear one as the garbage can model suggests (Campbell *et al.*, 2007).

The linear model of policy process is therefore regarded as a more useful framework that offers insight into understanding generalisable stages of policymaking, as well as possible and systematic ways of utilising research. Specifically, the linear models identify explicit process stages, which provides a clear framework for involving learning and knowledge utilisation in contexts that lack policy research. The clearer and more linear a policy process is, the more likely it is that research is used in a logical manner (Nutley *et al.*, 2007). Yet, this study chooses adopts a combination of the linear and non-linear policy process frameworks to broaden the limited understanding available on policymaking processes, and the role of policymakers' learning.

2.1.4 The research-policy gap

While the use of research in policy is becoming increasingly significant, the main concern remaining is how to ensure that research evidence has greater

impact on the policymaking process (Nutley *et al.*, 2002; Gough, 2004). The notion of evidence-informed or evidence-inspired policies emerged as policymakers attempted to enhance the rationality of their decisions. According to Davies (2004), evidence-inspired policies are guidance provided to and sought by policymakers, to assist them in their decision-making. Evidence informed decision-making aims to guide policymaking decisions towards choices that are more effective (McCall, 2009), and these processes provide policymakers with practical and action-oriented recommendations (Majchrzak, 1984). Yet, policymakers complain that academic research does not address the important matters they face when they need it to; researchers complain that the knowledge they generate is not understood or used effectively by policymakers (Levin, 2003). While evidence drawn from academia is capable of providing policymakers with recommendations, evidence in itself does not provide answers; rather it creates a basis from which decision-makers are able to make better-informed choices (Davies, 2004).

One of the most debilitating factors impeding effective research utilisation in policymaking is often argued to be a result of policymaking and academia being viewed as two different communities. The 'two communities' metaphor suggests that there are institutional, professional, and cultural differences between the two groups, making efforts for research utilisation difficult (Bogenschneider and Corbett, 2010; Dunn, 1980). While the notion of the two communities has been popular in research utilisation literature, the view of policy and academia as two separate communities fails to realise the range of interactions that occurs between the two groups (Newman *et al.*, 2016).

There are multiple factors, however, that emerge in the literature as barriers to research use in policymaking. These barriers are factors related to the

evidence itself, the policymakers involved, and the organisation encompassing policymaking.

In the case of the evidence, some of the barriers reported is quality, wherein research that is seen as high in quality is more likely to be used or read by both policymakers and practitioners (Nutley *et al.*, 2007). In addition, research is more likely to be used by policymakers if it originates from a trustworthy source or organisation (Court and Young, 2003; Percy-Smith *et al.*, 2002). A recurring argument within the literature related to the nature of evidence is the lack of alignment between research and policy needs. Evidence users often complain that research and evidence are not aligned to their daily practice (McKenna *et al.*, 2004). Policymakers want research to provide practical direction, but it rarely does. When research is found relevant to the day-to-day work of policymakers, relevancy is more likely to have precedence over issues of quality (Nutley *et al.*, 2007). Key to the relevancy argument is the timeliness of research findings. According to Greenberg *et al.* (2003), in a large study on US social policy, relevant timeliness of evidence was seen as more important to uptake compared to its perceived generalizability.

The literature reveals many studies that look at the personal characteristics of policymakers who report evidence utilisation (Nutley *et al.*, 2007). The results of these studies have highlighted the key issue of policymaker characteristic and capacity. For instance, Rickinson (2005) finds that policymakers with higher levels of education are more likely to use research. Particularly, policymakers who have engaged with research previously are more likely to utilise evidence. Those policymakers tend to have a more positive approach towards evidence, and its influence on their work (Nutley *et al.*, 2007; Rickinson, 2005). Weiss (1999) highlights the importance of policymakers' self-

interest and ideology as a personal characteristic shaping the use of research. In his argument, Weiss (1999) suggests that policymakers will use research only when it is aligned with their current ideology and personal interest. Similarly, Brown (2013) stresses that the dominant ideological beliefs of policymakers influence the realisation of evidence utilisation. For policymakers who are interested in utilising evidence, access to research is reported as a major barrier (Percy-Smith *et al.*, 2002 and Booth *et al.*, 2003).

One of the main institutional barriers that policymakers report in using evidence is the lack of time to search or read research across the setting of the organisation (Sheldon and Chilvers, 2000; Rickinson, 2005). The lack of time and resources to support the development of research restricts the inclusion of evidence, and limits the formation of evidence-based practices within the organisation (Rickinson, 2005). When evidence is not viewed as an integral part of an organisation's practice, limited resources and opportunities for evidence utilisation are put in place. In addition, as the context of policymaking is characterised by a heavy workload and demand for change, evidence use takes a low priority (Nutley *et al.*, 2007; Sheldon and Chilvers, 2000). Another institutional barrier to research use is a culture of resistance to evidence (Rickinson, 2005). Institutional resistance to the use of evidence is usually associated with a limited understanding of the influence that evidence can have on practice, and the value of research on policy outcomes (Nutley *et al.*, 2007). In addition, institutional resistance increases when evidence use is not seen integral to the vision of the organisation (Sheldon and Chilvers, 2000)

In addressing the obstacles on evidence use discussed above, the policy literature identifies linkages between academia and public servants to be consistently associated with the utilisation of social research in a policy context.

In three large-scale survey investigations of policymakers and academics on research utilisation, linking researchers with policymakers was the main determinant of research use in policymaking (Arend, 2014; Cherney and McGee, 2011; Landry *et al.* 2001). Linkages, defined as formal and informal interaction processes, are extremely important in supporting research transfer in policymaking (Nutley *et al.*, 2007; Weiss, 1995). Hence, for better research utilisation in public policy, linkages between policymakers and academics must be invested in. While linkages are capable of providing a forum for research exchanges, linkages in themselves are not predictors of effective research utilisation.

Effective research utilisation requires not only linkages as discussed, but also collaborative problem solving by both policymakers and academics. This is possible through the use and application of systematic evaluative rationality when addressing policy problems (Sanderson, 2006; Mintrom, 2007). The application of evaluative rationality makes the use of research instrumental where it enters the decision-making process as part of policymakers' search for knowledge (Weiss, 1979). Thereby, both policymakers and social scientists play a critical role in deciding what evidence is used, and how it is utilised in policymaking processes. Hence, a successful coordination between the applications of the scientific approach to policymaking requires a framework for policy analysis, and models that support linkages for evidence utilisation. This can take shape through the creation of policy networks and communities that foster direct links between government and non-government actors.

Yet, what these structures are short of is a framework where learning is central, in which the use of research and evidence is fundamental to those involved. To address this conceptual limitation, the concept of Policy Learning

Communities (PoliLCs) have been put forward by Stoll (2008) and Brown (2013) as a structure for collaborative decision-making with a collective emphasis on learning to enhance policy choices. Yet, the concept of PoliLCs is in the early stages of concept development, with no exploratory investigations using this concept yet conducted. As an emerging concept, PoliLCs is investigated theoretically first in the literature review for this study, and then empirically through the research in section 2.2. It is argued that the PoliLCs concept is capable of providing a framework where linkages between policymakers and academia can be explored closely, with specific attention to learning.

2.1.5 A Potential Concept: Policy Learning Communities

The concept of PoliLCs has the potential to offer research novel understandings of policymakers' interactions and the role of learning and research utilisation within these interactions; if any. In particular, PoliLCs fall between a sub-government-like structure of policymaking (e.g. Policy Networks), and structures of purposeful learning by professionals (e.g. Professional Learning Communities and Communities of Practice). The alternative perspectives of Professional Learning Communities, Communities of Practice, and Policy Networks will be defined and discussed further in the next section. As an emerging concept, there is no formative definition of PoliLCs as yet. However, the current understandings of PoliLCs in the works of Stoll (2008) and Brown (2013) associate the concept with the more developed concept of Professional Learning Communities (PLCs)—an in-school setting where groups of teachers share and critically interrogate their practice—a concept frequently recognised as best practice for teacher's collaborative learning.

They key words constituting the concept of PoliLCs are policy, learning, and communities. It is not insignificant that the word 'learning' is found at the centre between 'policy' and 'communities'. As I discussed earlier under the study of learning in public policy (see section 2.1.2), the last decade of public policy research has witnessed government keenness and efforts to apply learning when making policy (Freeman, 2006; Hannaway and Mittleman, 2011). As such, the concept of PoliLCs falls in line as a possible concept to guide a study such as this, exploring learning-driven practices in the setting of education policymaking specifically.

Stoll's (2008) and Brown's (2013) works are the only two significant contributions to developing the concept of PoliLCs thus far. While both works discuss the same concept, each offers an individual perspective based on previous work and expertise. A brief definition of the concept can be synthesized from Stoll's and Brown's interpretations as:

The purposeful grouping of actors within policymaking who are linked by a shared policy problem or interest in a critical, ongoing, reflective, collaborative, growth-promoting, inclusive, and learning-oriented practice.

Before going forward to discuss the authors' interpretations, I will provide brief background information on both authors to enable a clearer understanding of the respective knowledge and experience underlying each interpretation.

Louise Stoll is Professor of Professional Learning at the Institute of Education, University College London. The focus of her research is the creation of capacities for learning to support educational improvement. The particular emphasis with much of her work is on professional learning communities, and how they are able to support capacities for learning. Christopher Brown is a Professor of Education at the University of Durham. Brown's research interest is mainly centred around evidence-informed policymaking, and how research

can inform policy. Previously, Brown held a civil servant role in government research and policymaking. What both authors agree upon is that PoliLCs as a concept is loosely based on PLCs. Yet, Stoll focuses on how PoliLCs provide a framework to enhance capacities for learning, while Brown approaches them as a framework to enhance research use in policymaking.

Stoll builds towards the concept of PoliLCs in her essay titled “Leadership and Policy Learning Communities”, published in the European Training Foundation’s (ETF) 2008 yearbook. The ETF is a decentralised agency of the European Union that aims to help transitioning countries to harness their human capital through training, and the production of high-quality publications. ETF’s objective is to be “an international reference point for human capital development and specialists” (ETF, 2008, p. 3). In Stoll’s (2008) essay, the author explores PoliLCs as a potential framework to guide capacity development. According to Stoll (2008), capacity is “the power to engage in and sustain the learning of people at all levels of the education system for the collective purpose of enhancing pupils’ learning” (p. 107).

Stoll’s work begins by highlighting the benefits of ‘learning communities’ that are present in schools, towards enhancing social capital and learning. Stoll’s (2008, p.107) definition of PLCs here extends on Bolam *et al.*’s (2005, p. 5) definition thus:

[PLCs are] Inclusive, reflective, mutually supportive and collaborative groups of people who find ways, inside and outside their immediate community to investigate and learn more about their practice in order to improve all pupils’ learning.

Stoll then goes on to argue that learning communities should not be limited within the boundaries of schools, or confined to a single organisation, especially when there is a benefit in broadening membership to facilitate the extension of

available knowledge (Stoll, 2008; Cummings *et al.*, 2007). Stoll illustrates in three examples from her personal experience how learning communities are found in policymaking. She then puts forward PoliLCs to both expand the boundaries of PLCs, and apply the concept to a broader policy context. I will use these three personal examples to identify the features and characteristics that Stoll associates with PoliLCs.

The three examples (Stoll, 2008) begin as an attempt to find an answer to her inquiry into how the idea of learning communities applies to policy learning (p. 108). The first is the case of the Rotterdam Programme for Educational Underachievement in Germany; the second was within the OECD's Education Directorate; and the third was within the Austrian Leadership Academy. From the examples provided, the following variables were identified: the context of PoliLCs, their purpose, interaction patterns, participants, and the learning activities within them. Table 2.1 tabulates the information summarised from Stoll's (2008) three examples.

	PROGRAM FOR EDUCATIONAL UNDERACHIEVEMENT	OECD IMPROVING SCHOOL LEADERSHIP ACTIVITY	THE AUSTRIAN LEADERSHIP ACADEMY
CONTEXT	- Local policymaking in Rotterdam Germany	- Within OECD Education Directorate	- Academy founded by Austrian Minister of Education
PURPOSE	- Formative evaluation - Evaluation for learning	- Support policy development through in-depth analysis	- Preparing school heads
INTERACTION	- Twice a year for 4 years - 2 policy leaders in all sessions - Two-way learning process	- Three conferences and three workshops over one year period	- Learning together over four forums - Actors work with a learning partner and a collegial coaching team
PARTICIPANTS	- Local policymakers - Research and policy experts - International experts - Politicians - Practitioners with teaching background - Change facilitators	- Policymakers from 19 countries - Civil servants - Education and policy experts	- International experts - Ministry leaders - District inspectors - Staff of teacher training institutes - Executives from national and provincial education authorities
LEARNING ACTIVITIES	- Act as critical friends - Ask provocative questions - Feeding ideas from research and experience - Examining situation - Unbiased feedback - Support in designing of effective strategy - Dialogue and inquiry - Exploring intentions and actions - Feedback - Expert suggestions - Mutual problem solving	- Synthesise research - Identify innovative and successful policy initiatives and practice - Facilitate exchanges of lessons and policy options - Identify policy options - Sharing and reflection from experience - Sharing of national data In-depth policy analysis - Dialogue and presentation from experts	- Sharing of creative pedagogical techniques - Introduce research on leadership for learning - Share research and learning on school development and personal capacity

Table 2.1 Synthesising lessons from Stoll three examples of PoliLCs (Stoll, 2008)

To synthesise the key findings from Stoll (2008) (see table 2.1), I identify the following key assumptions about PoliLCs based on the descriptions offered in the examples above:

Context: PoliLCs can be situated at a local or an international level. The lessons in Germany and Austria were bounded within a local setting yet involved an international expert team. On the other hand, the OECD example was broader in boundary as it involved actors from 19 different countries.

Purpose: When PoliLCs were intentionally formed, they shared a common purpose of supporting policymakers in either a policy or program. The support took the form of formative evaluations, evaluation for learning, in-depth analysis, and training for capacity development.

Interaction: The face-to-face interactions documented in all the three examples were close in frequency. The German group met twice a year over four years, the OECD group met through three conferences over a one-year period, and the Austrian group met over four forums in one year. Additionally, interaction was noted in all examples to adopt a two-way approach of learning where the policymakers and experts continuously exchanged knowledge and input.

Participation: Participants in the three PoliLCs were not drawn from a specific group or entity. All three involved diverse groups of participants that included policymakers, experts, politicians, and civil servants amongst others.

Learning activities: Four key thematic learning activities took place across the three examples: learning about the context, learning from research, a dialogue and feedback practice, and identifying options to implement. Learning about the context involves experts in the PoliLCs being involved in learning about the problem, the intentions of actors involved, and local data.

Stoll (2008) puts forward examples of situations that she uses to explain how learning communities operate in policymaking. Yet, these examples are not gathered through an empirical or scientific investigation. The essay is published by a credible entity; however, it is not peer-reviewed. Rather, these are personal accounts of PoliLCs based on the author's experience and expertise in the area of learning communities. Nevertheless, these examples allow me to explicate generalised characteristics and features of PoliLCs that I will utilise in this study to compare and analyse my findings on the ground.

Brown (2013), in his approach, introduces the concept of PoliLCs in his book, entitled *Making Evidence Matter*, as a potential framework that is capable of tackling issues and barriers to evidence use in policymaking. PoliLCs, in Brown's (2013) perspective, are a means to facilitate types of expertise and evidence use in a regular and valuable part of the policymaking process. While Brown's work on PoliLCs is mainly theoretical, he engages with the concept based on his expertise in research in policymaking, and his familiarity with PLCs. The work links the concept with pre-existing research areas, and puts forward assumptions about PoliLCs that are supported by other areas of knowledge. I draw three key assumptions on PoliLCs from Brown's work where PoliLCs are seen as: a framework facilitating the interaction between research and policy; a model for challenging dominant ways of thinking; and a means of research dissemination.

PoliLCs as a framework for interaction characterises the practice of policymakers and researchers conjoining to facilitate learning. However, the establishment of learning communities in itself will not provide the interaction necessary to develop expertise and share evidence. For these interactions to be successful in knowledge adoption, Brown suggests the need for all actors

to play a relationship related role required of them. This role is realised through the participation and engagement of social actors in dialogue and interchange. PoliLCs as a framework is capable of providing the venue or structure for this interaction. Specifically, it is able to promote face-to-face interactions, which are found in the literature to be a successful approach to evidence use.

Brown (2013) focuses on examining PoliLCs as a tool to support knowledge adoption and evidence in the policymaking process. There is not much discussion of the exact characteristics of these PoliLCs, but the assumptions are based on the general concept of learning communities. While the concept is proposed as a solution to many of the barriers to research use in policymaking, it has not been empirically tested.

A gap remains in present understanding of how the concept of learning communities can be actualised in policymaking, and what can we learn about their effectiveness in introducing research into the policy process. Specifically, whether it has explanatory power. In the next section, I will be exploring existing alternative perspectives found in policy literature to critically investigate PoliLCs as a workable concept, and understand what common features it shares with other perspectives.

2.2 Collaboration as a key component of learning, knowledge mobilisation, and research utilisation in policymaking

As there remains a weak empirical evidence base PoliLCs as an exploratory tool, this study draws on research from the fields of professional learning communities, communities of practice, organisational learning, and policy networks that have collaboration at their centre. The choice of these four

models to explore is their close alignment to the early conceptualisation of PoliLCs by Stoll (2008). As in, I identified these models for their demonstration of collaborative and social learning, diverse participation of actors, and joint purpose. In addition, the chosen models come from developed literature bodies and have been explored for their capability of facilitating social learning and knowledge mobilisation. This evidence, together will allow this study to have a better understanding of PoliLCs in action.

The broadest definition for collaborative learning is that it is a situation where two or more individuals learn or attempt to learn something together (Dillenbourg, 1999). Models for collaborative learning amongst professionals are settings or groupings where individuals come together to interact in relation to their practice, and exchange learning. The roots for collaborative learning in professional settings lays within the assumption that learning between professionals is fostered by social relationships and interactions (Hecló, 1974; Lave and Wenger, 1991). While collaborative learning is found in each of the four models, each model differs in purpose, scope, and context. Together, these models offer learning on how specific collaborative frameworks are capable of enhancing participants' engagement with learning, thus increasing the likelihood of learning from research and evidence.

The empirical evidence in policy literature has repeatedly linked research utilisation with support from efforts that connect researchers with policymakers (Arend, 2014; Cherney and McGee, 2011; Landry *et al.* 2001). Thus, I argue that collaborative learning models that have been effective in other settings are capable of providing a guiding framework that connects policymakers with researchers. Consequently, learning from the policy literature and the early literature on PoliLCs must be viewed against what is known about collaborative learning models in other settings. Hence, the exploration of collaborative learning models is supported by the view that these

models have been found effective in linking multiple actors with one another in a process of learning.

This section seeks to answer the following questions in relation understanding PoliLCs further: 1) what can be learnt from collaborative learning models; 2) what key variables support the effectiveness of the collaborative learning models; and 3) to what extent do collaborative learning models facilitate research use and evidence-informed practices? The section will begin with an introduction to the four selected models of professional collaborative learning. Common key concepts related to the effectiveness of these models will then be identified, and engaged with. I conclude this section by applying the learnings from the alternative model to the context of the present study.

2.2.1 Models of Collaboration

Each of the four models will be briefly introduced in this section based on the frequency of use in their areas of literature. A diagram showing the key concepts related to the effectiveness of each model will summarise the introduction of the models. I will then use the diagrams of key concepts for all four concepts to produce a shared conceptual map of key variables behind effective collaborative learning models, and critically engage with these variables to identify how they can be transferred to the policy setting.

The models were selected based on reviewing the literature of education, policy, and management science for models that are similar in the feature of social learning, diverse participation, and joint action to the early conceptualisation of PoliLCs, but differ in context. The PLCs model, in particular, was chosen as it is associated with both Stoll's (2008) and Brown's (2013) conceptualisation of PoliLCs. Brown (2013) added the dimension of associating PoliLCs with models that exist in policy literature; hence, policy networks were selected. Communities of practice and organisational learning that appear in the literature in education and management respectively, were

selected after I explored both models and found learnings from them to be useful in building this study's theoretical framework for PoliLCs.

Organisational Learning

As an empirical area of study, organisational learning has been well presented in the area of business and management for over 20 years. As the concept has been prominently positioned in business literature, organisational learning is often expressed as a means to improve business performance. Most learning in an organisation occurs at the individual level. Berends *et al.* (2003) defines organisational learning as:

The development of knowledge held by organisational members ... and is applicable in organizational activities, therewith implying a (potential) change in those activities (p. 1042).

Learning organisations are those that are able to develop processes where knowledge from experience is created, acquired, and transferred to improve performance (Nevis *et al.* 1995; Garvin, 1993). The empirical data shows that organisations do improve their knowledge and innovation capabilities by leveraging the skills of their employees through knowledge transfer (Easterby-Smith *et al.*, 2008). Mechanisms for organisational learning must be initiated for learning to take place. These mechanisms could be in the form of setting up teams, communities, or group meetings (Nevis, *et al.* 1995). When organisational learning becomes commonplace within an organisation, employees continually expand their capacity, thinking, learning, and ability to learn together (Senge, 1990). In addition, employees systemically problem-solve, learn from one another, exchange experiences, and share knowledge within a specific problem-area (Garvin, 1993).

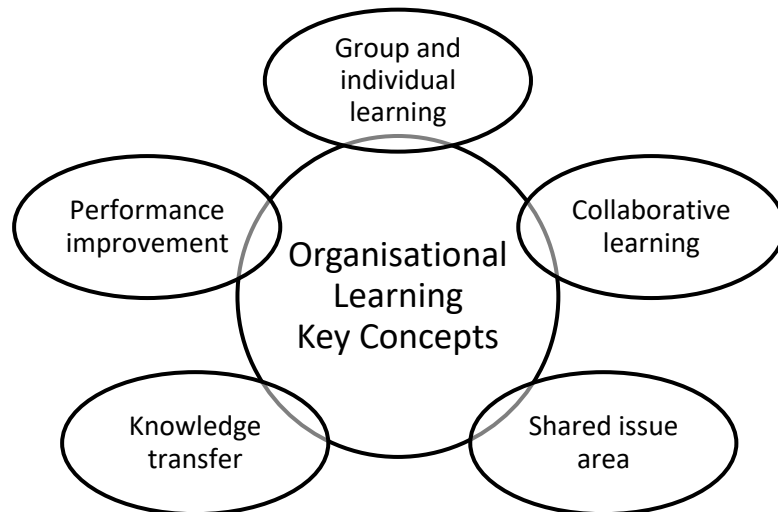


Figure 2.2 Key concepts surrounding organisational learning identified in the literature.

Communities of Practice

The concept of a learning community formed the foundation of the development of the Community of Practice (CoP) term in the early 1990s. CoP as a term was first suggested by Lave and Wenger (1991) on the assumption that learning for practitioners occurs in social relationships within the workplace, rather than in classrooms. The focus of their work was on how the informal interactions between beginners and experts create learning and skills development. Lave and Wenger (1991) use the perspective of the apprenticeship model of learning that is mostly vocational. This can be seen through their use of examples of how midwives, meat cutters, and tailors learn skills on site. The focus of Wenger's (1998) work is the social character of human enterprise, in which, through interaction, learning is generated. Thus, Wenger (1998) argues that practices are created socially and should be identified as a product of a community that is created over time. The concept of CoP continued to develop and was defined in Wenger *et al.* (2002) as: "groups of people who share a concern, a set of problems, or a passion about

a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p.4).

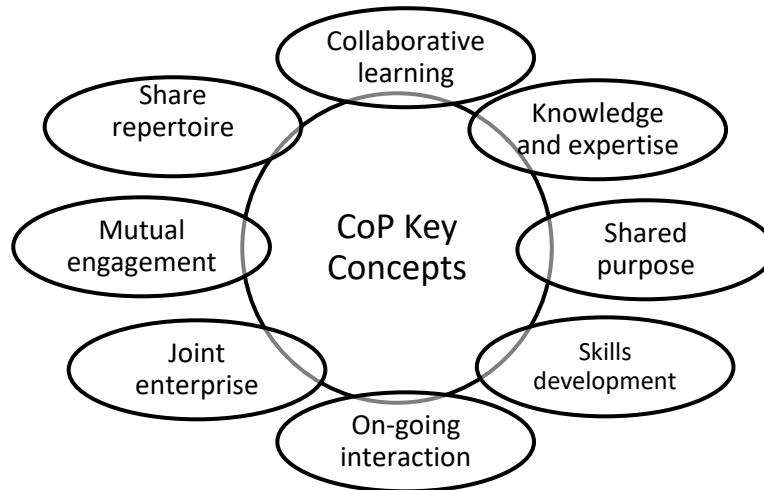


Figure 2.3 Key concepts surrounding communities of practice identified in the literature.

Professional Learning Communities (PLCs)

PLCs is one of the most prominent models for collaborative learning initially emerging in the business literature through the works of Senge (1990) on the learning organisation, but manifested later in the education literature. The concept of PLCs is the closest theoretical model to PoliLCs, where Stoll (2008) and Brown (2013) developed the conceptualisation of PoliLCs on the theory and practice of PLCs. However, the PLC literature I explore is mainly based in the context of education literature as I am looking at education policymaking. While there is no one definition of PLCs, there is agreement that it is a setting where groups of teachers gather to share and question their practice in an on-going, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Mitchell and Sackney, 2000; Toole and Louis, 2002).

PLCs emerged essentially as a framework to support the continuous development of teachers within their school setting. Hence, the emphasis on it

as a concept is underlined by the belief that only when teachers are supported through engaging and collaborative work environments, are they able to enhance their practice more effectively (Louis *et al.*, 1995). Figure 2.4 below is a visualisation of the key concepts and characteristics that were found within effective PLCs in the works of Bolam *et al.* (2005) and Stoll *et al.* (2006). I will come back to discussing the key concepts at the end of this section after introducing the remaining collaborative models.

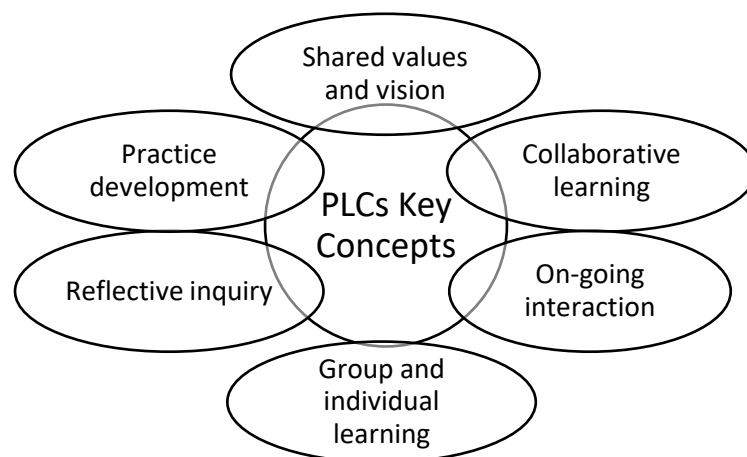


Figure 2.4 Key concepts surrounding professional learning communities identified in the literature.

Policy Networks

The existing literature sheds light on the discourse of policymakers' interactions with one another during policy formulation, and the impact of these interactions. The interactions, according to the literature, create policy subsystems or communities where policymakers collaborate to develop a common perspective when looking at public policy (Kenis and Schneider, 1991; Sabatier, 1988; Haas, 1992). Policy subsystems are characterised by networks of actors who are interested in influencing certain aspects of policymaking. Hence policy networks are policy subsystems. These networks emerge in

response to public policy problems by creating collaborations and partnerships (Williams, 2002). Carlsson (2000) identified multiple subcategories for collaboration in policymaking which leads to network development. According to Carlsson's (2000) categories, networks may form as sub-government, iron triangles, issue networks, policy communities, epistemic communities, implementation structures, and advocacy collations (see table 2.3). After an in-depth look at these different categories, I have tabulated them across multiple variables presented in the literature.

From the six policy networks typology, the ones most relevant in my study are epistemic and policy communities. This is because only these two types purposefully engage knowledge experts, and most likely engage in purposeful learning from research and evidence. Epistemic communities are networks of professionals with expertise and competence in a specific domain, and are also found to have policy-relevant knowledge (Haas, 1992). The purpose of epistemic communities is to inform policy by identifying various solutions and assessing policy outcomes. Successful epistemic communities reduce policy uncertainty through policy learning (Dunlop, 2017).

Policy community networks are made of multiple actors who gather to exchange resources in one area of policy concern. The purpose of policy communities is to influence policy by shaping the public policy agenda. While the purpose of epistemic communities and policy communities differ in their role within policy, they share common key features. Both communities involve opportunities for policymakers to engage with other actors, which exposes these communities to learning through interaction.

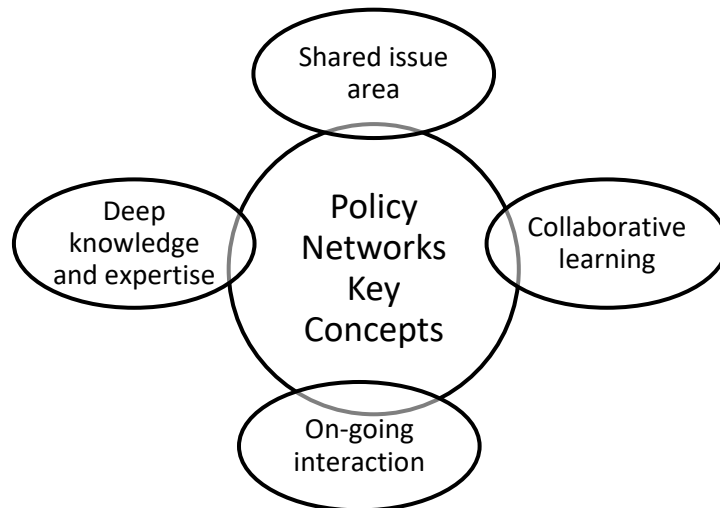


Figure 2.5 Key concepts surrounding policy networks identified in the literature

The models explored operate as learning systems where practitioners connect to problem-solve, and exchange ideas. Through these learning systems, knowledge and evidence can be provided with an environment to thrive in. Specifically, when organisations or individuals utilise collaborative learning models to engage in purposeful learning from evidence. However, it is important to realise that only when collaborative learning models are effective, are they able to achieve an environment that facilitates learning and knowledge mobilisations. The effectiveness of the collaborative learning models explored depends on five common dimensions I define from the literature. The five common dimensions are an outcome of cross-analysing common features between the four models explored that have contributed to their effectiveness according to the literature. These dimensions which are self-identified are: the presence of learning, participants' interaction, joint enterprise, a focus on development, and a supporting system (see figure 2.7).

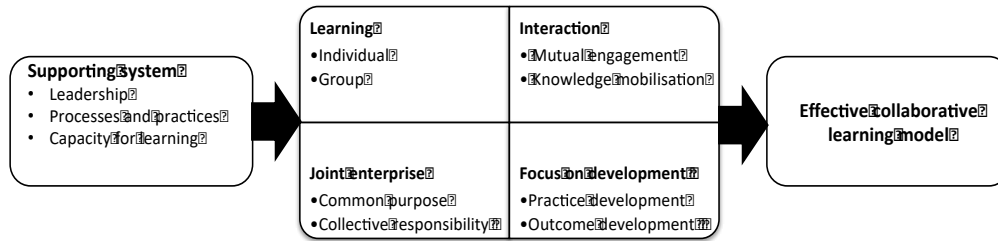


Figure 2.6 The five dimensions of effective collaborative learning models

In the next section, I explore each of the five dimensions of effectiveness individually with a focus on answering the following questions: 1) what are the main theories and arguments surrounding or supporting the dimensions; 2) how transferable are these dimensions to the context of education policymaking; and 3) what challenges or obstacles might these dimensions face in the context of education policymaking. Within each of the dimensions, I discuss how the dimension can be seen to facilitate knowledge mobilisation and research utilisation. In doing so, I attempt to demonstrate how the individual dimensions support the collaborative models in facilitating knowledge mobilisation.

2.2.2 Individual and group learning

Learning occurs as actors engage with external ideas and people of different contexts (Stoll, 2008). At the base of the collaborative models explored, learning is identified as an outcome of various actors engaging with one another, and bringing in different ideas. In one of the most comprehensive studies of effective PLCs (Bolam *et al.*, 2005), the majority of respondents (74%+) from survey data of 393 schools, and interview data from 16 schools, identified that teachers were learning from one another and took responsibility for this learning as part of their involvement in the PLCs. Bolam *et al.*'s (2005) empirical study was based on responses from schools, and while the common context is the school setting, grounds for contextual differences between the sample must have existed. Yet, these differences did not matter when it came

to participants' self-reporting on their learning in PLCs. What can be learnt from these findings is that when collaborative learning models are established, even when they are not based in school settings, they are capable of facilitating greater opportunities for learning. Thus, if government entities are looking to enhance learning within their organisations or policymaking processes, initiating models for collaboration is deemed necessary.

In policymaking, concepts of policy networks and social learning are not new. In earlier work by Hecló (1974) on social learning, policy networks as frameworks were often identified as providing a platform for policymakers' collaborative learning. The interactive nature of policy networks creates an opportunity where actors within these networks are presented with different policy ideas, but are also able to develop these ideas or introduce new ones (Kisby, 2007). These policy networks permit communication channels to open between those inside and those outside government, where ideas and information float through these channels, and the whole network of involved people (Stone, 2002, p.45). Hence, through these interactions for learning, government entities are capable of benefiting from the resources embedded in engaging diverse actors in collaborative learning practices.

PLCs, CoP, organisational learning, and policy networks all enable learning through the social interaction of participants. In a large-scale study of 137 networks in 1500 schools over four years, Jackson and Temperley (2007) identify the concept of 'networked learning' to be at the heart of learning in collaborative and network-like models such as PLCs, PoliLCs, CoP, organisational learning, and policy networks. In their model, Jackson and Temperley (2007) argue that when actors come together in collaborative models, three fields of knowledge exist: public knowledge, practitioner knowledge, and new knowledge (see figure 2.8).

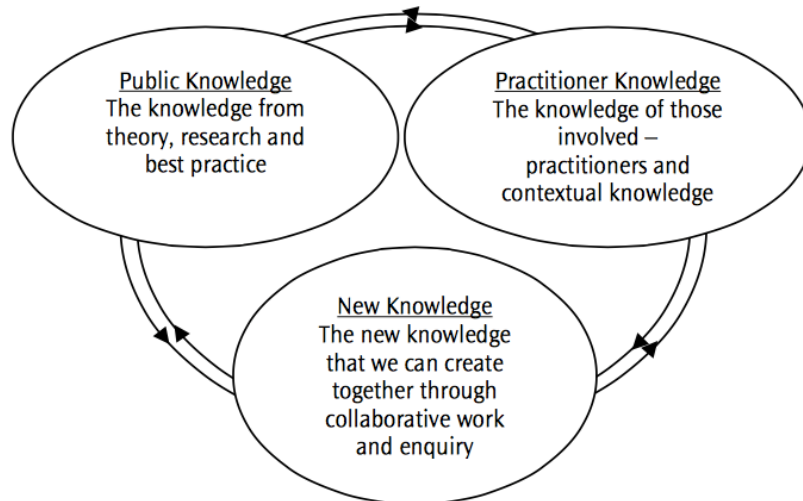


Figure 2.8 Three Fields of Knowledge in networked learning from Jackson and Temperley (2007, p. 48).

According to Jackson and Temperley (2006), networked learning is present when “individuals...in a network come together in groups to engage in purposeful and sustained developmental activity informed by the public knowledge base, utilising their own know-how and co-constructing knowledge together. In doing so, they learn with one another, from one another, and on behalf of others” (p.6). The three fields of knowledge model can better represent knowledge sharing in PoliLCs as these communities engage actors from a wider network, in which each brings along contextual knowledge and public knowledge, and together facilitate the creation of new information.

A key aspect of learning and the mobilisation of knowledge in PLCs and CoP learning is the social experience of co-constructing knowledge (Stoll, 2008; Wenger *et al.*, 2002). Collective learning is evident through collective knowledge creation (Louis, 1994), whereby learning communities engage in dialogue about information and data, interpret these and distribute them among the community. The interaction that takes place between actors in collaborative models typically involves sharing of information, insight, and advice (Wenger *et al.*, 2002). Through these interactions, individuals share experiences and

tacit knowledge in a free flow, hence enhancing their skills and abilities through fostering learning (Wenger, 1998). One essential practice in the co-creation of knowledge, particularly in PLCs and CoPs, are practices known as reflective inquiry and collaborative discussion. These include what Louis *et al.* (1995) refer to as 'reflective dialogue' that encourages frequent examination of practice through mutual observation and joint planning (see also Hord, 2004). Reflective inquiry seeks to convert tacit knowledge into shared knowledge through interaction (Fullan, 2001), and encourages applying new ideas and information to problem-solving to address participants learning needs (Hord, 1997).

While the co-construction of knowledge is a collaborative practice of actors in effective learning models, individual actors play an instrumental role in learning too. The concept of 'knowledge brokers' in the literature highlights the agency of individual participants in learning models as promoters of learning, and the dissemination of learning. Knowledge brokers can be seen as actors that initiate learning by the actions they take, or the relationships they develop. Knowledge brokers become essential when they are seen as facilitating roles that assist networks and their members in successful policy collaboration outcomes, particularly when knowledge brokers transfer knowledge through mobilising between networks.

The role of individual actors in the process of learning provides information on which individuals do carry out learning processes. However, Bessant and Tsekouras (2001) argue that while individuals carry out learning, it is organisations that provide an environment for learning to take place. Learning and knowledge sharing are seen as critical resources key to organisational success (Wenger *et al.* 2002). Knowledge is identified as an organizational asset which is activated by cultivating these collaborative learning models (Wenger *et al.* 2002). Cultivating learning platforms means that

existing ties are fostered, and new relations are supported to allow members to work together on sharing knowledge and solving problems (Cox, 2005).

The empirical evidence associated with the four collaborative models explored have shown the benefit of these models in creating an opportunity for practitioners to socially interact in a professional setting, which as a result brings upon opportunities for learning and knowledge mobilisation (Jackson and Temperley, 2005; Bolam *et al.*, 2005; Wenger *et al.*, 2002). I continue to build an assumption based on existing literature on PLCs, CoP, organizational learning and policy networks that, the successful implementation of collaborative models can facilitate knowledge mobilisation and research utilization in policy contexts.

The collaborative learning models create a foundation for social learning to take place. What these models lack however, is intentional processes or mechanisms for the exposure and utilisation of evidence. An example of these intentional processes can be seen in Stoll's (2008) case study of the three PoliLCs under the learning activities of the community: feeding ideas from research; synthesis research; sharing of data and analysis; and introducing and sharing research. PoliLCs as a concept is focused on being a collaborative learning framework that engages participants intentionally with research and evidence. Hence, to explore the viability of PoliLCs as an exploratory concept that supports learning from evidence, further empirical studies are needed to: a) establish the types of learning present in PoliLCs; b) identify the role and uses of evidence in PoliLCs; and c) identify mechanisms to enhance research utilisation for policymaking.

2.2.3 Joint enterprise

A common and main dimension of the explored collaborate learning models is that they share a purpose, and operate under a 'joint enterprise'. A joint enterprise is not only having mutual goals, but a common purpose which

involves mutual accountability (Wenger, 1998). Under a joint enterprise, participants in the learning models work collaboratively towards a common goal. An example of joint enterprise in PLCs is the focus on student learning. Members of PLCs in schools take collective responsibility towards improving students learning (King and Newmann, 2001; Leithwood and Louis, 1998). In CoP and organisational learning, the joint enterprise is often the sharing of learning to enhance a specific practice (Wenger, 1998). In policy networks, members share a common policy concern, and the joint enterprise becomes the identification of policy choices to address the shared concern (Kingdon, 1984; Sabatier, 1988). At the heart of the joint enterprise concept is the notion of community—the grouping of people with same interest (Merriam Webster, 2018). When professionals collaborate collectively under a shared purpose, commitment to the common goal is enhanced (Newmann and Wehlage, 1995).

In what way can a 'joint enterprise' impact learning within a policy community? To answer this question, I use the case of the PLCs model to demonstrate the impact of a shared goal on the learning activities of a community. The PLCs model in particular has the common purpose of improving (student) learning, which takes place through the process of teachers engaging in on-going reflective learning practice as a community (Bolam *et al.* 2005). The joint enterprise of 'student learning' has been determined by the model of PLCs to require teachers to come together and share learning practices. Hence, learning practices and activities are at the core of teacher PLCs who are working towards improving student learning.

Transposing learnings from the PLCs model to the PoliLCs model, the joint enterprise for policymakers in PoliLCs is policy or program improvement in policymaking. Through the PoliLCs cases explored by Stoll (2008) and Brown (2013), learning practices are found at the core of achieving policy improvement. Hence, if for the purpose of achieving the joint enterprise for

PoliLCs that learning is needed, research utilisation must become an integral learning resource. In particular, when PoliLCs engage subject experts and academics who purposefully choose to share research findings as seen in Stoll's (2008) three cases (see section 2.1.5)

2.2.4 Interaction

In the collaborative learning models explored, interaction forms the basis of both the collaboration and learning. By interaction, I refer to social interaction—the acts, actions, or practices of two or more people mutually oriented towards each other (Rummel, 1976). Not only do mutual interactions form the basis of collaboration, they may also bind members of the community into one social identity (Wenger, 1998). To understand the interaction dimension further, I focus on answering three main questions: who interacts, why community members interact more with one actor than another; and what role interaction plays in enhancing learning and research utilisation.

The question of 'who interacts?' in a learning community is a question of inclusivity. There are two perspectives to consider when addressing the question of who interacts in settings of collaborative learning. Wang and Ahmed (2003) consider interactions in organisations to be either a 'closed' or 'open' system (p.11). A closed system refers to organisational interactions for learning that are restricted within the organisation itself; for example, the case of the PLCs model that is often found to include mainly teaching staff within a school (Stoll et al., 2006). An open system on the other hand refers to a system where cross-organisational interactions for learning take place, and members inside and outside of the organisation come together to interact. Policy networks are an example of a more inclusive member structure compared to PLCs. In policy networks, actors beyond the government are given the opportunity to participate (Sandström and Carlsson, 2008). In epistemic communities, for instance, participants beyond policymakers can include knowledge experts and

social scientists (Carlsson, 2000). Stoll's (2008) case study highlighted the involvement of research and policy experts, knowledge experts, politicians, practitioners, civil servants, teaching staff, and ministry leaders in PoliLCs. All of this indicates that the PoliLCs as a learning model can be recognized as an open system that involves actors beyond the organisations, and facilitates interactions between them.

We have learned that when actors interact with one another in a collaborative learning model, the interactions they share with one another allows them to form a shared set of beliefs and purposes (Stoll *et al.*, 2006; Bolam *et al.*, 2005; Wenger, 1998). The diversity of actors in a learning model or community is beneficial for learning, specifically when actors come together to problem-solve. Hence, if policymakers are keen to enhance learning within their organisations, specific attention to expand the circle of social interaction must be given, specifically attention to identifying actors outside of the organisation that can assist in solving the policymaking problem in hand.

What motivates actors in a learning community to interact with one another? The literature on PLCs and policy networks identifies two common variables: feeling trust and respect towards the other actor(s). Trust underpins a commitment that network members will not betray or exploit one another, but instead show collegiately in their interactions. When organisations are seeking to align goals to create a learning community it is essential that the work focuses on a clear issue, building trust and positive relations is key to creating and developing sustainable communities (Bolam *et al.*, 2005). According to Bryk *et al.* (1999, p.767), the strongest facilitator of interaction within a professional community is 'social trust' among its members. Particularly, when members of the community trust one another "a powerful social resource is available for supporting collaboration, reflective dialogue, and derivatisation, characteristics of professional community". Hence, trust as a variable becomes

an indicator of an increased likelihood of interaction between members of the community.

In policymaking literature, little is known about individual-level interactions in collaborative learning settings (Stevens, 2018). Howlett *et al.* (2015) argue that an understanding of learning and its processes within policy networks is an important contributor to policy outcomes, even if there is limited attention given to it. In particular, answers to questions on the conditions in which members are more likely to interact with one another are not commonly studied. Hence, the lack of scholarly attention to the individual learning activities in policy collaborative settings means that we have limited knowledge to explain interaction patterns, the impact of these patterns on learning, and how can leaders facilitate individual learning.

Interaction is critical to knowledge sharing and research utilisation, largely as a result of the social nature of learning. Through interaction, tacit knowledge is constantly converted into shared knowledge (Fullan, 2011). Nonaka's (1994) organisational knowledge management theory views knowledge to be created by, and residing within, individuals through a social process. Nonaka highlights two dimensions in theorising organisational knowledge: the epistemological dimension, and the ontological dimension. The epistemological dimension highlights continuous interaction of tacit and explicit knowledge via dialogue. As for the ontological dimension, the emphasis is on the role of social interaction and communities in the development of new knowledge. An interaction between both dimensions results in a spiral model of knowledge creation (Nonaka, 1994).

In an exploration of socialisation within an educational setting, Yeh *et al.* (2011) emphasise the importance of creating physical or virtual spaces for community interaction. In Yeh *et al.*'s (2011) study, an effort was undertaken to build a learning community, facilitate observational learning, and encourage

participation. The results of the study presented empirical evidence that blended learning, group discussions, feedback, and guided practice are critical tools for effective knowledge management (Yeh *et al.*, 2011). Therefore, effective research utilisation requires specific attention to the processes of effective knowledge transfer.

Collaborative learning models facilitate interaction between participants, research, and evidence. It is argued that face-to-face interactions are the most convenient method for the sharing of learning (Weiss, 1995). According to Crandall (1989), face-to-face contact “facilitates the adoption of disseminated practice, to a far greater extent than the mere provision of information” (p. 95). Key to these interactions, however, is that there is an on-going two-way dialogue where there is a sustained effort towards evidence dissemination and utilisation (Court and Young, 2003). These on-going dialogues have been identified as practices of PLCs, CoP, organisational learning, and policy networks.

Hence, models for collaborative learning are capable of providing a platform for interaction, and the exchange of resources. Specifically, collaborative models foster a two-way flow of learning through the focus on interaction and dialogue as part of their frameworks.

2.2.5 Focus on development

The fourth common dimension across the explored effective collaborative learning models is an essential focus on learning for collective organisational development or improvement. For PLCs that takes the shape of improving student learning through teacher’s effective collaboration (Stoll *et al.* 2006; Bolam *et al.* 2005). For CoP, it is the focus on improving a specific practice by participating in a practice-based community (Wenger, 1998). For organisational learning, it is the improvement of business performances through the sharing of learning within the organisation. As for policy networks,

the focus is to improve policies or address policy-problems through involving a network of actors (Cummings *et al.*, 2007). To transpose lessons from these models, the early conceptualisation of PoliLCs views the model as focusing on the development of policy or policy solutions through policymakers' effective learning and collaboration. There is empirical evidence that explores the effectiveness of PLCs and CoP on achieving improved learning outcomes.

The literature on PLCs as collaborative structures that are capable of enhancing teachers practice is backed up by nearly four decades of research (Louis *et al.*, 1995). Key to the success of PLCs can be the presence of purposeful professional conversations amongst teachers guided by student performance data (Louis and Marks 1998; Strahan, 2003).

In the CoP literature, the communities of practice form in an attempt to utilise the resources of the firm more effectively to gain competitive advantage (Nonaka and Takeuchi, 1995). Hence, the focus is mainly on the organisation developing its competitive advantage through the use of learnings and knowledge transfer. This was seen in Yamklin and Igel (2012), study of three manufacturing organisations that set up CoP purposefully to enhance performance, two cases were found to deliver tangible organisational outcomes after engaging in CoP.

The cases on PLCs and CoP presented here demonstrate the ability of collaborative learning models to enhance practices through engaging individuals in groups to enhance learning. More importantly, the focus of collaborative learning models on development is a critical component that is capable of supporting more research utilisation. Hence, if policymakers in curriculum development are able to see direct benefit of research utilisation in their practices, research may be capable of playing a more central role, specifically, when policymakers identify precise goals for improving policy

outcomes and align the achievement of that goal with them utilising research and learning.

2.2.6 Support system

Organisational and individual factors are critical for identifying areas that can support the potential effectiveness of PoliLCs as a concept, and as a framework for understanding and supporting policymakers' learning. In addition, exploring the supporting factors allows this study to identify specific organisational and individual-related strategies that are found in other areas of literature to support professional learning and research utilisation. I will begin by discussing organisation-related factors first followed by individual-related factors.

2.2.6.1 Organisation-related supporting factors

Organisations can play a role in building processes and structures that foster an environment that is conducive to learning. Learning and knowledge mobilisation in organisations are established when organisations choose to set up a system to achieve learning, and create the motivation in members to achieve this learning (Gilson *et al.*, 2009). To achieve this, the key factor supporting learning through specific interventions is the creation of formal models for interaction and learning. To facilitate learning, it is essential organisations are structured in a way that allows time for employees to talk and exchange conversations on professional issues (Louis *et al.*, 1995). Yeh *et al.* (2011) emphasise the importance of creating physical or virtual spaces for community interaction. In Yeh *et al.*'s (2011) study, an effort was undertaken to build a learning community, facilitate observational learning, and encourage participation. The result of the study presented empirical evidence that blended learning, group discussions, feedback, and guided practice are critical tools for effective knowledge management.

Therefore, effective knowledge management requires specific attention on the processes of effective knowledge utilisation. As such, initiating formal professional learning opportunities within an organisation is a critical factor supporting learning (Bolam and McMahon, 2004). For these interaction opportunities to become sustainable, a consideration of frequency of interaction is necessary. The empirical data suggests that direct interventions that are distributed over a longer period of time with frequent contact are more likely to result in successful utilisation of learning and research (Huberman, 1990; Dentler, 1984; Peterson and Emrick, 1983). Moving the learnings to the policy context and back to what it means for PoliLCs, the main points in which organisations can support learning is through the creation of collaborative opportunities, establishing formal learning opportunities, leadership support, and designated time for interaction.

2.2.6.2 Individual-related supporting factors

Individual related supporting factors refer to factors that are associated with the participants in the learning community that positively influence learning, and research utilisation. I identify three individual factors from the literature of the four models that came across multiple times which were: group dynamics, individual mental modes, and individual capacity for learning. Each of these factors is found in the literature of PLCs, CoPs, policy networks, and organisational learning.

Learning within communities and organisations, as I have discussed throughout the literature review, is a result of interaction. Hence, group dynamics and the role of individual members impacts learning (Gherardi and Nicolini, 2000). Enhanced group dynamics have been found in the literature on organisational learning to enhance the learning environment within the community (Wenger, 1998). Hence, achieving positive group dynamics where

members work with one another, develop trust, and achieve a unified goal is necessary. When trust is fostered within and felt experienced by the community of learners, members are more likely to be encouraged to share and exchange learnings with one another.

Another important individual-related feature that impacts learning and research utilisation is individuals' 'mental modes' or 'predispositions' before joining the learning community. According to Roberts (2006), actors come to communities with existing preferences and beliefs, which impacts the absorption and creation of certain knowledge. What Roberts refers to is the mental modes or opinions and thoughts that individuals have before joining the communities. Policy literature identifies that for learning and research utilisation, policymakers will only utilise learning that aligns with their current ideology or personal interest (Weiss, 1999). According to Brown (2013), any use of evidence by policymakers depends on how closely the evidence aligns with their beliefs. Hence, actors' predispositions might either support or hinder attempts at collaborative learning and research utilisation.

The key to engaging in learning within a community lies centrally in the ability or 'capacity' of those involved to adopt knowledge and their ability to utilise learning. Capacity, according to Stoll (2009, p.1), refers to "the quality that allows people, individually and collectively, routinely to learn from the world around them and to apply this learning to new situations so that they can continue on a path toward their goals in an ever-changing context". In absence of this capacity for learning, it is argued that the likelihood that learning and research are utilised would decrease.

The three individual factors I discuss in this section, that have been prevalent in the literature on PLCs, CoPs, and organisational learning, are facilitated through constant and on-going learning interactions that take place in learning communities. Most prominent, however, is the ability of learning

communities to enhance capacities for learning. In communities where researchers are jointly collaborating with policymakers as proposed by the PoliLCs concept for example, specific expertise of interpreting and analysing data can be transferred from the researchers to the other actors involved.

2.2.7 Summary

To conclude this section, I apply the dimensions discussed to both the policy context in general, and the specific curriculum education policy context of this thesis to draw out a proposed conceptual framework of PoliLCs that I present in the next section (see table 2.3). The identification of the five dimensions and their application to the policy setting was the product of my original synthesis of existing literature in the bodies of education, management, and policy. The golden thread across the different literature bodies that enables this novel grouping of the five dimensions as a way to explore PoliLCs, is that the basis of these dimensions lies solely on the social interactions between professionals that are empirically found to enable learning.

Dimension	Application to policy context (through learning communities)	Application to thesis context* (through learning communities)
Individual and group learning	Policymakers interacting for learning with social scientist, practitioners, researchers, and policy experts	Policymakers interacting for learning with curriculum experts, Arabic language specialist, Arabic language researchers, Arabic language teachers
Joint enterprise	Improve policy through seeking expertise and learnings	Improving the policies related to the Arabic language curriculum for primary to secondary grades through collaborative learning practices
Interaction	<ul style="list-style-type: none"> • Interaction is on-going and motivated by trust and shared beliefs • Knowledge mobilised and research utilised through interaction 	<ul style="list-style-type: none"> • Interaction is on-going and motivated by trust and shared beliefs • Knowledge and research on pedagogy, curriculum, and assessment is mobilised
Focus on development	Focus on improving policy	Focus on improving policies that impact the Arabic language curriculum for primary to secondary grade students
Organisational supporting factors	<ul style="list-style-type: none"> • Organisation/leadership are committed for learning • Interaction structures exist (e.g. teams, communities, processes) • Organisation/leadership facilitates opportunities for interaction (e.g. time, meetings, virtual discussions) 	
Individual support factors	<ul style="list-style-type: none"> • Participants have and/or develop capacity for learning • Group dynamics are positive and trust relations develop • Individual mental models allows for engagement with learning 	

Table 2.2 Application of the five dimensions of effective collaborative learning models developed in the literature review to the research context of education policy in the UAE.

2.3 Policy Learning Communities: From a theory to an exploratory framework for policymakers learning

This section builds on the previous section of the literature review, and develops the framework for PoliLCs further. I start by revisiting the definition of PoliLCs. I then reflect on how PoliLCs compares to the alternative models in the previous section and develop the philosophical underpinnings of the

concept. I conclude this section with the theoretical framework of my research followed by the research questions.

2.3.1 Revisiting the PoliLCs definition

In my initial definition, if PoliLCs in section 2.1.5, two dimensions out of the five dimensions of collaborative learning models are present: individual and group learning, and a joint enterprise. The focus of my earlier definition was on the purposeful grouping of actors that practice joint learning activities. However, the definition lacked any reference to social interaction, and a focus on development as identified in the five dimensions (see table 2.3). Hence, I further my definition of PoliLCs based on what has been learnt from the other collaborative models, and is transferrable to the policy setting:

A government-initiated learning interaction process where actors are grouped in policymaking collectives to address specific, shared policy problems in a critical, ongoing, reflective, collaborative, growth-promoting, and inclusive practice.

I consider any efforts, attempts, and practices where policymakers are purposefully interacting for learning with actors from within and beyond the organisation, and addressing a shared policy problem, as a PoliLC. I support my earlier assumption in that any engagement by policymakers in a community structure for learning can check the list for the current definition of PoliLCs. Yet, my assumption can present a definitional problem similar to efforts to define both PLCs and CoP in the literature.

The concept of PoliLCs developed here can act as a framework to explore and explain policymakers' learning. With support from the literature on collaborative learning model, this concept provides a framework that takes into consideration the context of policymaking with specific attention to learning practices. Thus, if more literature and empirical evidence develops around the concept of PoliLCs specifically, and more information is provided on how they are created, sustained and supported for further learning, the model can

profoundly support collaborative learning for policymakers in contexts such as the UAE, where this is needed.

2.3.2 Comparative analysis: PoliLCs versus collaborative models

The purpose of this section is to identify how PoliLCs is different to the other collaborative perspectives explored. Each of the four alternative perspectives covered in the previous section offers a distinct framework to look at learning, yet, are all based on a social constructivist paradigm. To build on identifying how PoliLCs differs as a concept, I tabulate multiple features that I conclude from my review of the literature on alternative perspectives (see table 2.4). The common feature across all of these perspectives is that they are frameworks that are found to facilitate interaction between multiple actors, and as a result, make it more likely for actors to learn through sharing of information, and the co-construction of knowledge. Nevertheless, it is only possible for these frameworks to be effective if they have the necessary organisational and individual support needed for them to be effective.

The alternative perspectives share many common features between them. This could be explained by the fact that all of these frameworks build upon the idea of 'social learning' better described by Hecló (1974). All the four perspectives –PLC, CoP, Organisational Learning, and Policy Networks—describe a framework of group interaction, and collective learning. Consequently, it is no surprise that these perspectives share more than half of the features that the literature identifies, such as but not limited to individual and group learning, joint enterprise, and interaction. The differences, however, stem from three main differentiating factors: 1) the *domain* of the framework; 2) the *interaction boundaries* of the model; and 3) the *creation* method of the model.

	Policy Learning Communities	Professional Learning Communities	Communities of Practice	Organisational Learning	Policy Networks
Domain	Policy	Schools	Technical or business domain	Organisations	Policy
Learning					
<i>Individual and group learning</i>	YES	YES	YES	YES	YES
<i>Reflective</i>	YES	YES	YES	YES	YES
Joint enterprise					
<i>Shared vision</i>	YES	YES	YES	YES	YES
<i>Joint action</i>	YES	YES	N/A	N/A	N/A
<i>Collective responsibility</i>	YES	YES	YES	YES	N/A
Interaction					
<i>Group interaction</i>	YES	YES	YES	YES	YES
<i>Inter-organisational</i>	YES	N/A	YES	YES	YES
Focus on development					
<i>Focus on learning</i>	YES	YES	YES	YES	N/A
<i>Practice oriented</i>	YES	YES	YES	YES	YES
<i>Policy oriented</i>	YES	N/A	N/A	N/A	YES
Creation process	Intentional	Intentional	Self-organising; Intentional	Self-organising; Intentional	Self-organising; Intentional
Perspective towards learning	Continuous and ongoing learning; Co-construction of knowledge	Continuous and ongoing learning; Co-construction of knowledge	Sharing of information and experience; Learning in working	Collective learning; Sharing; Creating; Spreading	Linkages supporting learning exchanges;
Challenges to effectiveness	Actor beliefs, values, and predispositions; Group dynamics; Organisational culture	Actor beliefs, values, and predispositions; Group dynamics; Organisational culture; Size; Location	Actor beliefs, values, and predispositions; Organisational support; Functionality; Cliques	Actor beliefs, values, and predispositions; Organizational culture; Group dynamic;	Problem complexities; Actor beliefs, values, and predispositions; Organizational culture
Limitation to concept	Lack of empirical data	Lack of clarity of concept	Lack of clarity of concept	Broad perspective; Focus on theory over practice	Metaphoric use; lack of coherent theory

Table 2.3 Comparative analysis of characteristics between alternative collaborative models and PoliLCs

The domain plays a critical role in differentiating PoliLCs from the other alternative perspectives, mainly, in terms of how applicable are learnings from

these models to the policy domain. From the alternative perspectives, only Policy Networks are set entirely the policy domain, yet, it is possible for CoP and organisation learning to be present in a policy domain too. However, Policy Networks as a framework is mainly based on explaining the typology of interaction that occurs when civil servants connect with diverse actors to work on alternative policy solutions. It is not a framework for purposeful collaborative and on-going learning as the PoliLCs attempts to be. CoP and OL on the other hand have been used in the context of policy even though these concepts are often identified as too broad. Most discussions in the literature on Organisational Learning focus on the philosophy rather than “the gritty details of practice” (Garvin, 1993, p. 79). In support of Garvin’s (1993) statement, Ulrich *et al.* (1993) argue that “to date there have been far more thought papers on why learning matters than empirical research on how managers can build learning capability” (1993, p. 59). PoliLCs as I pointed out earlier in the literature review is associated the most in terms of similarity with the model of PLCs. Yet, the domain for PLCs is largely based in schools, making the participants in these learning communities mainly teachers and leaders within a specific school. These limitations mean that the learnings from the PLCs evidence in terms of its effectiveness, sustainability, and support may fall short in exploring learning communities in policymaking due to the differences in context.

The formation process of the four perspectives explored are either intentional or self-organising. In the current state of PoliLCs where empirical investigations are limited, the only exploration by Stoll (2008) indicates that these communities are intentionally set-up. Stoll’s (2008) three cases are all situations where an organisation has deliberately formed a learning community for the exchange of learning. I have discussed previously in this section that PoliLCs cannot be left to occur naturally, specifically, due to the fact that access

is needed for external actors to take part in a policy process or policy learning experiences.

I argue in my definition of PoliLCs in the previous section that that any efforts, attempts, or practices where policymakers are purposefully interacting for learning with actors from within and beyond the organisation, and addressing a shared policy problem to be a PoliLCs. Hence, tools to support these learning interactions means that first, PoliLCs is viewed as an independent framework that is capable of enhancing learning with its own merit, and not a transfer attempt of the PLCs model to policymaking as Stoll (2008) and Brown (2013) suggest. Second, that more research is conducted to understand PoliLCs as a framework to explore collaborative learning in policymaking. Third, this research needs to make use of empirical evidence in PoliLCs in creating knowledge and resources on how the framework can facilitate learning and knowledge utilisation in policymaking further. Only when PoliLCs is viewed as an independent concept and research area, can we begin to identify how the model can be supported, what barriers it faces in offering understanding, and what role it plays in supporting knowledge mobilisation and research utilisation.

2.3.3 Philosophical underpinning of learning communities

I begin identifying the philosophical underpinnings that guide my exploration of PoliLCs in this study, by unpacking the concept to its basic form. The key philosophies that underlie the study of learning communities are those that adopt a social constructivist perspective to learning. Social constructivism refers to the focus on individual's learning as an outcome of social interactions in a group. Amongst the leading contributors to social constructivism are Jean Piaget, Lev Vygotsky, and John Dewey.

One of Piaget's main contributions is his theory of how children develop cognitive abilities. At the core of Piaget's (1977) learning theory, learning is

identified as an outcome of an active construction of meaning rather than a passive activity. As learners, Piaget asserts that making sense of new information is associated with what we already know: our mental schemas. Learning is therefore constructed when individuals experience things in relation with knowledge they already possess. Thus, participants within the PoliLCs engage in a re-construction of their mental schemas by being actively involved in the collective social construction of knowledge.

Piaget also comments on the role of the collective in learning: “the most remarkable aspect of the way in which human knowledge is built of...is that it has a collective as well as individual nature” (Piaget, 1971, p. 359). Piaget *also* believed that social life is a “necessary condition for the development of logic” and that social life “transforms the individuals very nature” (p. 239). Hence, it is through an individual active process that takes place within a collective that human knowledge is built. Both are processes likely to occur when policymakers in a learning community come together to socially construct knowledge.

Vygotsky’s (1978) social development theory aligns with Piaget argument that learning is an active process that takes place in a social interaction context. Vygotsky roots his work on cognitive development within three major themes, of which all three play a role in underpinning PoliLCs theoretically: social interactions, the more knowledgeable other, and the zone of proximal development. Vygotsky views learning as an active process that takes place in the context of social interaction. The more knowledgeable other refers to someone who has higher ability or understanding than the learner in relation to a specific task, process and concept, while the zone of proximal development refers to the difference between what a learner can do without help compared to what he or she can do with help. Through learning interactions, argues Vygotsky (1978) argues that individuals construct meaning

by internalising new knowledge, through interacting with a more knowledgeable other within a zone of their proximal development, during which it becomes part of the learners' enhanced thinking. Social interaction as a pillar to learning aligns with the theoretical underpinnings of the PoliLCs concept; community interactions impact how participants make meaning of the learning that takes place. Vygotsky argues that learning is a "necessary and universal aspect of the process of developing culturally organized, specifically human psychological function" (1978, p. 90).

The more knowledgeable other as I stated above refers to individuals who have a better understanding than the learner, and as a result, are able to support the learning process of others within the community. In my argument earlier on PoliLCs, the capacity of participants to make use of learning is essential in achieving effective learning communities. Vygotsky's more knowledgeable other is present in the case of PoliLCs, as these would be members who have a better understanding of interpreting and using knowledge and research in the process of policymaking. These members are more likely to have engaged previously with research such as those with an academic background. Together with other learning community members, the more knowledgeable actors are able to use their skills in guiding the other participants in making use of learning. This results in less knowledgeable actors improving their capacities for learning as a result of engaging with actors who are more knowledgeable.

The zone of proximal development refers to the potential that collaborative problem solving with more capable peers has, in comparison to individual problem solving. PoliLCs as a structure for public policy problem solving is more likely to benefit from the opportunity for collaboration between knowledgeable peers, compared to processes that are less collaborative. Specifically, as a structure that aims to enhance learning in policymaking

through the utilisation of knowledge and research, PoliLCs offers a structure where coaching from the ‘more knowledgeable others’ helps in achieving the learning goal set. Consequently, all Vygotsky’s three concepts are central in the philosophical underpinning of PoliLCs, specifically, in theoretically viewing PoliLCs as a social interaction-based learning opportunity, where policy problem solving is improved through guided learning by more knowledgeable others.

For PoliLCs to offer the ideal platform for learning, the social environment where learners collaborate is important to consider. In Dewey’s (1916) work, the social environment surrounding learning is influenced by the “degree in which an individual shares or participates in some conjoint activity” (p. 26). Dewey believes that experiential learning—learning by doing—is the way in which people learn best. Thus, learners thrive in environments where they can interact with learning and knowledge. PoliLCs as collaborative platforms can achieve experiential learning through becoming on-going interaction structures between policymakers and learning. When structures for learning are developed to support PoliLCs, there is a higher chance for supporting an environment that facilitates active engagement with knowledge (see Dewey 1916).

To theoretically underpin PoliLCs, I employ a combination of Piaget’s notion of learning and Vygotsky’s social development theory, with Dewey’s theory on experiential learning (see figure 2.9). PoliLCs is situated within a social constructivist approach to learning where learning from one another is social, active, and experiential. Yet, to achieve effective learning, attention to both the environment for learning and capacity of those involved is integral.

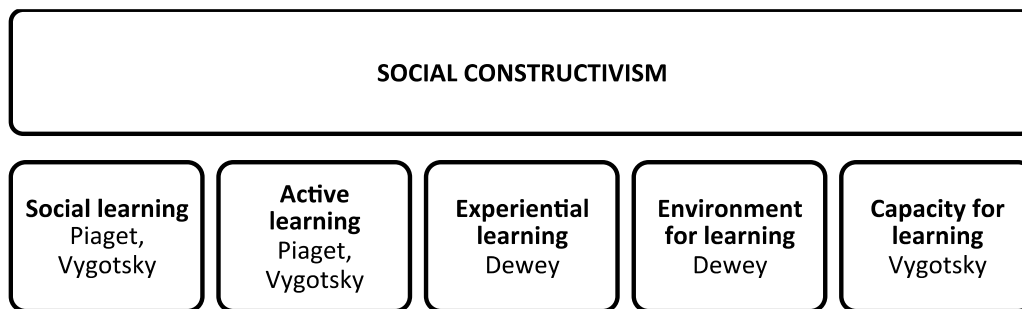


Figure 2.8 Social constructivism theories underpinning PoliLCs

The constructivist outlook on learning and learning communities could be seen as the manifestation of moving from the “age of the individual to the era of community” (Feldman, 2000, p. xiii). When policymakers engage in learning communities, they are involved as both individual learners and collective learners. As each policymaker chooses to become engaged in a learning community, they become engaged as individuals who seek knowledge independently. Their involvement in the community, however, places their individualistic efforts of learning in a social setting where they generate new learnings by actively collaborating and building on their pre-existing knowledge. In the collaborative setting of learning communities, policymakers’ individual learning can benefit from the collective work with more capable peers, and enhance their learning experience in addressing policy problems. For that to be achieved, learning needs to be supported through environments where the social construction of knowledge is facilitated. In conclusion, the philosophical underpinning of PoliLCs in this section allows me to move now into forming the theoretical framework to address my thesis’ research question.

2.3.4 Theoretical framework

The literature review began by discussing learning in public policy, which led to the exploration of collaborative learning models that can support the manifestation of purposeful and on-going learning in policy processes in education. The exploration was guided by two key assumptions: one, that the

policymaking process can benefit from learning and knowledge utilisation; and two, that learning and knowledge utilisation is fundamentally the result of social interactions.

I view PoliLCs at this point as both a lens to explore the characteristics and nature of learning communities in policy, and a means to gain a deeper understanding of how and why actors interact for learning. An understanding of the interaction patterns is an attempt to realise the current role of knowledge mobilisation and research utilisation, and identify opportunities for improvement. While this thesis has thus far taken the wider view through the literature review in grounding and developing PoliLCs theoretically, I intend to focus this research particularly on trying to understand the interaction aspect for learning that occurs in communities within education governance; specifically, the interactions of policymakers in learning communities that are created to address an on-going policy problem. In the case of this thesis, I refer to the learning community within the Ministry of Education in the UAE, which interacts to address policies that impact the Arabic Language curriculum for primary to secondary grade students

I develop the theoretical framework drawing on two assumptions supported by the literature review and philosophical underpinnings. The first assumption is that learning is at the core of effective PoliLCs, and by learning I refer to three learning practices: social learning, knowledge mobilisation and utilisation, and evidence-based decision-making. These practices are the primary variables of PoliLCs (as seen in figure 2.10). The second assumption is that to achieve these three learning practices effectively, the following supporting variables are critical: the creation of interaction structures, embedding learning in the policymaking process, and developing the capacities for learning of the

participants. An effective learning community is one that successfully engages policymakers in on-going social learning, direct knowledge utilisation, and instrumental use of research in decision-making.

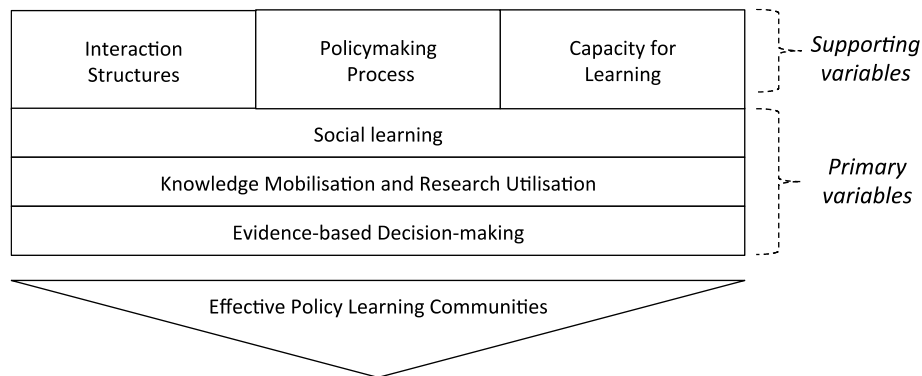


Figure 2.9 Theoretical framework of thesis

2.3.5 Research questions

By exploring and theoretically supporting the concept of PoliLCs as a framework for furthering evidence-informed decision making in education policy, I have begun to answer my initial research question at the beginning of this thesis. Specifically: how can policymakers best utilise research when forming education policy? My empirical investigation therefore extends from my initial question by further asking:

- How does the conceptualisation of PoliLCs provide a framework to explore policymakers learning in education policy?
- Additionally, what can be learnt about policymakers learning through using the framework of PoliLCs in furthering evidence based decision making?

I put forward the assumption that the PoliLCs concept provides a context-driven policy framework that explores existing collaborative learning in policymaking, and in doing so, is capable of providing knowledge on how

policymakers learn when they come together. This thesis research questions are the following:

- 1) What can be learned from the collaborative learning practices of the Arabic language curriculum policy community in the UAE to explore the conceptualisation of PoliLCs?
 - a. What can we learn empirically about PoliLCs (their nature, structure, and characteristics)?
 - b. How relevant is the theory and conceptualisation of PoliLCs to the actual practices of policymakers in curriculum policy?
 - c. What obstacles or barriers might need to be overcome to support effective learning in PoliLCs

Sub-questions:

- 2) How and why do actors in the Arabic language curriculum policy community in the UAE engage in social learning, knowledge mobilisation, and research utilisation?
 - a. What does the learning interactions between community members look like?
 - b. What factors impact the increase or decrease of interaction between learning community members?
 - c. What role does knowledge mobilisation and research play in these interactions?
- 3) What lessons can be learned in relation to furthering evidence-based policymaking in Arabic language curriculum policy in the UAE?
 - a. What factors individual and organisational are able to promote policymaker's engagement with knowledge mobilisation and research utilisation in policymaking?

3 Methodology and Methods

This chapter is a detailed account of the methodology used in this study. I begin by discussing my research aims and objectives to provide a base for exploring my methodological approaches. Next, I discuss the epistemological and ontological underpinnings that this research adopts, and clarify the stance that informs my methodology. The methodology and methods section follows and discusses the key methodological approaches utilised within this research, and the specific methods and instruments used for data collection and analysis. I then consider the reliability and validity of my methods and instruments in detail. I conclude this chapter with a discussion of the ethical issues raised by this research and the considerations that are put in place to address them.

3.1 Research Aims and Objectives

The primary aim of this thesis is to explore the concept of Policy Learning Communities theoretically and empirically as a potential framework for understanding and facilitating policymaker's interactions with learning. Moreover, this study attempts to gain a deeper understanding of how and why policymakers interact with learning by exploring the Arabic language curriculum policy community in the UAE. The assumption I put forward and discuss in the literature review is that the policy process can benefit from the framework of policy learning communities when developing policy.

Accordingly, the objectives of this research are to: 1) Collect data on the social structure and interaction patterns of policymakers in the Arabic language policy community; 2) Identify factors that impact policymaker's interactions within the policy community; 3) Analyse the effect of policymakers interaction on social learning, knowledge mobilisation, and research utilisation; 4) Assess the applicability of the theory on PoliLCs on practices of Arabic language

curriculum policy community in the UAE; and 5) Evaluate the concept of PoliLCs as a framework to support evidence-based policymaking in education.

3.2 Epistemology and Ontology

This section details the approach and methods used to address the research questions, and the ontological and epistemological underpinnings that informed these choices. Social research inquiry is full of uncertainties and challenges, and as McKenzie (1997) argues, research is, “embedded in a churning vortex of constructive and destructive tensions in which old educational certainties are replaced by new certainties” (p. 9). To that extent, social researchers have two key questions to address: what the social world comprises and what is the reality of being (ontology), and how can researchers claim to know (epistemology). In other words, how do we go about creating knowledge about the world in which we believe we live? (McKenzie, 1997). Before going on to discuss the epistemological stance taken within this thesis, I take a step back to consider how both my theoretical positioning of PoliLCs and research questions impacts my choice of research philosophy.

First, the philosophical underpinning of PoliLCs situates the concept within the learning theories of social constructivism, which is rooted in the works of Vygotsky, Piaget, and Dewey. This means that, PoliLCs encapsulates learning as an active process that takes place in a social interaction context. Social constructivism as a theoretical field for learning should not be confused with social constructivism as a research philosophy. As a research philosophy, social constructivism is a stance in which the ways in which meaning is influenced by a social context. Wherein, social constructivism as a theory of learning is associated with how learning develops between learners.

I argue that what can be known about learning and interactions in PoliLCs by me is an account of the participant’s active process of constructing

knowledge. As a result, meaning from the data collected when exploring PoliLCs cannot be regarded as objective since it's a construction by myself of the policymaker's constructions of reality (Geertz, 1993). Reality in this case is not definitive, and cannot be generalised to a larger population. Accounts by learners on learning and interaction is influenced by their own constructions of knowledge that is impacted by their mental mode. This stance has been reflected through my choices of research questions too, where an open-ended questioning style was used which focused on answering question of what, how, and why. As such, the nature of these open-ended questions provides a space for the presence of multiple realities. Consequently, my view of reality—ontology—and claim on knowing—epistemology—when researching PoliLCs is pinned in a constructivist nature based upon [the possibility of] multiple realities and the multiple accounts of learning by learners in a PoliLCs.

While I adopt a constructivist stance towards the view of knowledge and how knowledge is developed, one critical challenge I am confronted with in the context of this research is the reality of communities or networks. Mainly, developing an answer to whether networks and communities exist regardless of our thoughts or are they a social construction? Through my literature review, I have argued in multiple places that I consider any grouping of policymakers working towards a common policy goal with diverse actors to be a learning community. In doing so, I could be seen to adopt a positivist stance by treating communities as a real entity. However, this contradicts my ontological stance. I will discuss later in this section the positivist stance that the literature adopts towards networks and communities, and how I personally strive to align my ontological perspective with constructivism throughout my research.

3.2.1 Constructivism and Interpretivism

Constructivists assumes there is no objective truth waiting for us, and that truth or meaning depends on our inquiry and engagement with realities in

our world, where reality becomes a social construct (Crotty, 1998). Constructionists reject the objective stance to truth and knowledge. Reality in this study of policy communities is grounded within a constructivist epistemological position of the construction of knowledge. This study views realities and truth concerning social interaction as created through engaging with the world, while realising any analysis will be an interpretation of other people's interpretations of their own behaviour. This is not to say that socially constructed reality is not real. It is not a contradiction to say that something is socially constructed and also real.

Constructivism and interpretivism are natural allies, as all knowledge is made an interpreted within socio-political, cultural and historical moments in time, and human knowledge is fallible. Therefore 'truth' does not exist separate from human action in creating and interpreting it. However, not all knowledge is created equal, and this is key for a PoliLCs, where decisions made, and knowledge used, has profound consequences in political and social environments.

This study's ontological stance is one of multiple realities, but where there are common norms, culture, values, and belief systems within the group. In this study, this means that actors' responses are constantly subjected to their interpretation of the event in question and their understanding of the concepts of learning, interaction, and research utilisation. Yet, when taken together with the guidelines outlined in Chapter 2, these interpretations can form 'real' learning that can influence the formation, and management, of these and other PoliLCs down time.

3.2.2 Implication of epistemology and ontology on methodology and methods

The research literature demonstrates a direct link between qualitative research and both the interpretivist ontological approach and the constructivist

epistemological stance (Crotty, 1998). Within a constructivist epistemological assumption, conducting qualitative research means that the research gets as close as possible to the participants studied (John et al., 2017). The closeness to participants in qualitative research assists the researcher in gaining in-depth contextual evidence about a case along with cultural practices, beliefs, and emotions that are found in everyday interactions (Geertz, 1993). For instance, the interviews for qualitative research are often open-ended tend to encourage participants to talk freely and offer insight into how they feel and think about the topic studied (John et al., 2017).

The focus on this study is to explore PoliLCs as a workable concept by developing an in-depth account of how and why policymakers interact for learning. My unit of analysis comprises a group of individuals within a policy community for Arabic language curriculum development. This unit of analysis forms a case study, making this approach best suited as a methodology to address the aims of my thesis and answer my research questions.

Foundational considerations	Case Study
Research focus	Developing an in-depth description and analysis of a case or multiple cases
Unit of analysis	Studying an event, a program, an activity, or more than one individual
Type of research problem best suited for approach	Providing an in-depth understanding of a case or cases
Forms of data collection	Using multiple sources, such as interviews, observations, documents, and artifacts
Strategies for data analysis	Analysing data through description of the case and themes of the case as well as cross-case themes

Table 3.1 Foundational considerations for using a case study approach adapted from Creswell and Poth (2017, p. 104)

The case study approach allows for an in-depth understanding and exploration of the policy community case by engaging multiple sources of

information to understand the event. The event in this case in the learning exchanges and interactions of actors in the policy community when they come together. Consequently, the methods associated with the case study methodology are primarily the use of interviews, observation data, and document analysis (Creswell and Poth, 2017). To get an understanding of the whole policy community and its interaction, the Social Network Analysis (SNA) method is appropriate for collecting data on interaction and participants. SNA refers to a process of investigating social structure through using network measures and graph theory (Daly, 2010). The SNA will be employed through a survey sent to all policy community members, which compared to interviews, is likely to consume less time and have a higher response rate. In section 3.3 I discuss in detail the case study procedure and process undertaken. To summarise this section however, I go back to Crotty's (1998) four elements of research choices to highlight my choices of epistemology, ontology, methodology, and methods (see figure 3.1 below). Consequently, this thesis is situated within a constructivist epistemology and adopts an interpretivist perspective to the interpretation and collection of knowledge.

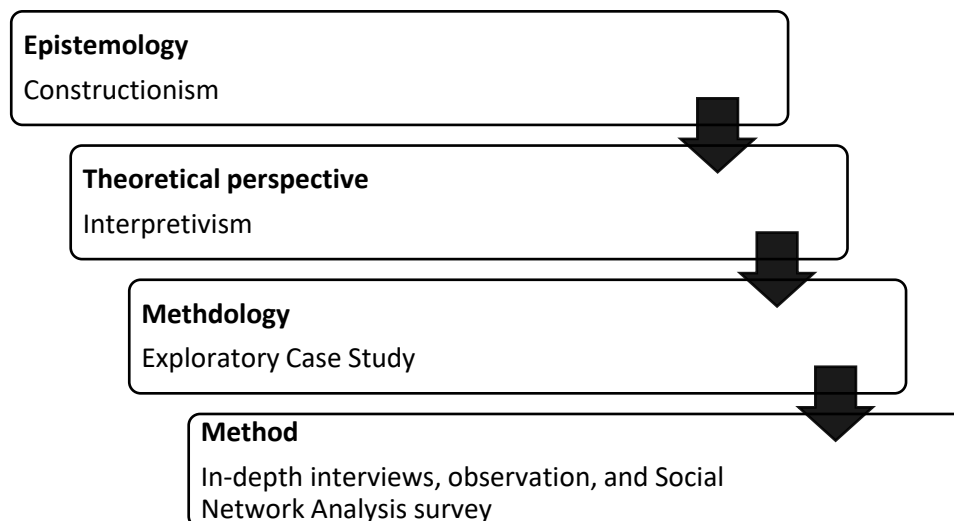


Figure 3.1 Choices made in this thesis using Crotty's (1998) Four Elements of Research model.

3.2.3 Social Network Analysis

A policy community is a sub-category of a policy network. To respond to the second research question on attempting to understand how and why actors in the policy community explored interact with one another and with learning, I have collected data on the social structure of the community. In doing so within this case study, I consider at this point the use of Social Network Analysis (SNA) as a method for analysing interaction and social structure in these networks.

Network analysis is grounded on the idea that social life is created by relationships and patterns amongst these relationships (Marin and Wellman, 2011). These analyses provide a framework for thinking about the social system by focusing on the relationships between actors or nodes. SNA is useful particularly in the investigation of community structure, kinship patterns, or directorships for instance (Scott, 1991).

SNA is focused on mapping and measuring the relationships and flows (ties) between people (nodes) in a community, network, or group (Scott, 2012). SNA exhibits two main factors that can imply positivist tendencies: 1) the numerical approach of the SNA method in collecting data on social life; and 2) the analysis methods of SNA that rely on hypothesising, deduction, and statistical analysis of social data. This could present a conflict, given this study's epistemological underpinnings. However, SNA as an additional method of analysing my data can be beneficial in adding depth to this study's understanding of how PoliLCs operate. While this study uses primarily a qualitative research methodology, the use of quantitative data within a case study is able to "enlarge the size of the canvas" which adds potential depth to the study (Brown, 2013, p. 82).

Network scientists have acknowledged that the production of social data involves a process of interpretation, that which is rooted in cultural and

social contexts (Scott, 2012). This acknowledgment can be seen as an effort by social scientists to try open SNA to an interpretivist approach. In acknowledging the role of interpretation in network data, social scientists have formulated two distinct types of data that can be collected: attribute and relational data. Attribute data is data on the features that distinguish actors, which can be categorical traits such as gender, or age. Relational data is data on the features of the ties and links between network members such as being friends, married, or co-workers (Borgatti et al., 2013).

The use of the SNA survey tool in this study is to 1) understand the patterns of interaction between community participants and reported knowledge exchanges; 2) visualise the interactions of participants in the community by using survey data to create a graphic representation of these interactions, 3) use data on participant attributes for descriptive purposes of the characteristics of participants, and 4) use network metrics to choose participants to interview (e.g. participants who differ in proximity to centre of community). Interviews have been used to gain a deeper understanding of participants' learning, nature of interaction, and knowledge utilisation. Qualitative interview data can support the SNA data in addressing relationships and their nature adequately even if only applied to a small amount of data (Brown, 2013). Consequently, for the curriculum policy community, I added a SNA questionnaire to the case study tools as an additional method to visualise the interaction structure of the community.

3.3 Methodology

The primary methodological approach adopted in this thesis is the case study, which in Yin's (1984) interpretation is an "empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in

which multiple sources of evidence are used” (p. 23). The case study models allow this study to combine qualitative and quantitative approaches to explore one localised empirical enquiry in-depth. Hence, allowing the use of both qualitative instruments of data collection through interviews, and the quantitative instrument use of a SNA survey. I argued in the previous section how the case study method aligns with my theoretical standing as well as research questions, making it the appropriate methodology to use. The distinctive need for a case study is based on the desire to understand a complex social phenomenon (Creswell and Poth, 2017).

Case studies are an empirical enquiry, which is “conducted within a localized boundary of space and time” (Bassey, 2012, p.156). The case study is a research approach where researchers focus on what is known as a bounded system in their investigation. This approach allows researchers to construct knowledge of the world from what can be seen and observed. Case studies are also an enquiry where multiple sources of evidence are used (Johnson, 1994: 20), and hence, when it comes to methods, it usually involves several different strands. The main approaches, however, are interviews, observations, and documentary analysis (Bassey, 1999).

In a bibliometric analysis on policy learning conducted by Goyal and Howlett (2018), 956 publications relevant were reviewed. According to Goyal and Howlett (2018), the methodology used to analyse learning in the sample explored included primary case studies, with much fewer efforts using techniques such as social network analysis, and document analysis. In addition, the techniques of data questions found to be mostly used to analyse learning in policy making were interview, in-depth interview, elite interviews, surveys, and questionnaires (Goyal and Howlett, 2018). As such, the use of a case study approach in exploring policy learning is a common practice. Yet, social network analysis is not commonly used for policy learning. Specifically,

the technique I adopt in this thesis of using SNA as a sampling method to identify interview participants was not identified in the works reviewed by Goyal and Howlett (2018). However, one recent study using a similar approach to my thesis was conducted by Von der Fehr et al. (2018). In this study, SNA is used as a sampling methodology to map municipal social networks of educational actors who are otherwise hidden to researchers. According to Von der Fehr et al. (2018), using SNA to identify actors to interview provided deeper insight. Hence, when attempting to study learning in policymaking within a network setting, the utilisation of an SNA tool within a case study will allow me to map actors who are otherwise unmapped, and through interviews, gain insightful knowledge.

3.3.1 Case definition and proposition

Classic case studies usually study an individual or group of persons as the case (Bromley, 1990). According to Scott (1991), if a researcher is not studying a natural group, then the boundary is determined by the research questions. In the case of this thesis, the primary research question is to find a case and context where learnings on the concept of policy learning communities, as well as how and why policymakers learn, can be established. As such, I utilise the definition I established of PoliLCs in the literature review to identify bounding features for case selection, illustrated in table 3.2.

Definition of PoliLCs	Feature	Application of feature on chosen case study
“Purposeful grouping of actors...	Organizationally established	Policy community established by MOE
...within policymaking...	Policy context	In education policymaking
...who are linked by a shared problem or interest...	Joint enterprise	Share concern for Arabic language curriculum policies
...in a critical, ongoing, reflective, collaborative, growth-promoting...	Interaction	Meet continuously
...inclusive...	Participation	Includes subject experts, practitioners, and policymakers
...and learning-oriented practice.”	Individual and group learning	Exchange learning and expertise

Table 3.2 Case bounding strategy using PoliLCs definition formed in p. 117 of this thesis

Hence, the unit of analysis in my study is a policy community at the Ministry of Education (MOE) in the UAE. The community I am exploring was created by the MOE in 2014 to work on developing and implementing policies related to the Arabic language curriculum for primary to secondary grade students the country. Participants in the community are identified and chosen by the Ministry, and are inclusive of policymakers at MOE along with external subject experts and practitioners.

Case propositions give direction to what should be examined within the scope of study (Yin, 1984). Hence, attention to stating the case study propositions is necessary to guide the types of data that must be collected. As for this study’s proposition, I attempt to look at how and why actors in policy communities interact with one another and learn.

My proposition is built upon an assumption guided by the literature review, that when policymakers are confronted by uncertainty, policy networks and communities are sought. When these communities are developed, policymakers interact with actors beyond the organisation to address the multi-dimensional challenges they face. In doing so, the on-going interactions within

the community or network established create a space for the exchange of learning and knowledge utilisation.

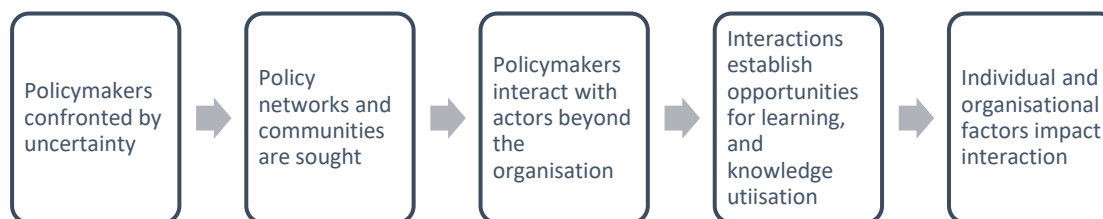


Figure 3.2 Summary of thesis propositions

The rationale for identifying the Arabic language curriculum policy community as a case study is driven by factors that are aligned with the propositions in figure 3.3. The frequent reporting in the UAE's media on the ongoing challenges of students' failure to perform adequately in the Arabic language curriculum marks this curriculum area *confronted by uncertainty*. The challenges led to policymakers at the MOE to *form a policy community*. As a result, policymakers formed an opportunity to *interact with actors beyond the organisation* to address the challenge. In the process of interacting, learning and knowledge utilisation is more likely to manifest, thus making this case a suitable venue in which to explore the research questions posed by this study.

3.3.2 Limitations

There are three main limitations that often confront case study research which involve deciding on the case, resource limitations (e.g. time, access, financial), and generalisability (Creswell and Poth, 2007; Yin, 1984). In this study, resource limitation and generalisability are the main two limitations confronted. In the case of resource limitation, gaining access to the case study sample and attempting to conduct interviews, and document collection was a challenge. This has been the case for document collection specifically, where I was unable to retrieve relevant documents that could aid in answering the research questions as I was told they are not available. To deal with this

challenge, I tried to collect the specific information that I sought in documents, such as the policy process of the community, through interview questions.

For interviews, however, the challenge was in getting participants to trust me as a researcher and to agree to participate. Building trust and credibility as a researcher in the case studied is important to gain access to participants (John et al., 2017). To address this challenge, I began by forming a relationship with one member of the community at MOE who managed the community. The relationship began with several phone calls to introduce myself, the work, and what I needed from the community. This led to access to a list of the Arabic language curriculum policy community members. The MOE community administrator sent an email to all the community participants introducing me, and encouraging community members to participate in the research. Consequently, participants were more likely to respond to my invitation to participate as a peer supported it.

The second limitation and common concern about case study research is the inability to generalise from case studies (Yin, 1984). With case studies, the cases are not considered sampling units and are usually too few to serve as an adequate sample to represent any larger population (Creswell and Poth, 2017). Instead, case studies form a generalisation to the theoretical propositions and not the population or sample (Yin, 1984). The goal in doing so is to expand and generalise theories to arrive at lessons learned, which in return go beyond the setting of the specific case studied. Case studies provide an opportunity for theoretical concepts to be empirically highlighted, and questions of how and why to be explored.

In addressing the generalisation limitation, analytical generalisation will be utilised when analysing the data. According to Yin (2010), analytical generalisations involve making a conceptual claim, and applying the theory and

claim to the case study. As a result, implications on situations in which similar events may occur can be suggested (Yin, 2010). As such, I will be addressing the application of my research propositions to the findings in the case study through applying methods of analytical generalisation. In addition, implications to both theory and policy will be addressed as this case study identifies itself in the theoretical context of policymaking and learning.

3.4 Methods and analysis

According to Crotty (1998), methods refer to the set of techniques and procedures that a course of research adopts; these include specific activities used to collect and analyse data. When methods are discussed in research, a level of detail in explaining these methods must be adhered to. Specifically, it is important that the methods and procedures implemented are described in as much detail as possible. Hence, this section will elaborate on the methods used in this thesis. Section 3.4 on methodology will begin with a summary of research methods and analysis (table 3.5). I will then discuss the quantitative data collection approach adopted (section 3.4.1), as well as the quantitative analysis approach (section 3.4.2). Similarly, sections 3.4.3 and 3.4.4 will discuss qualitative data collection and analysis methods used in this thesis.

I adopted a systematic approach to data collection and analysis, which began by gaining access to the research sample, followed by quantitative data collection and analysis. I then collected qualitative data and analysed it before bringing all the research results together.

Phases	Procedures	Products
Gain access to research sample	<ul style="list-style-type: none"> Email and phone call gate keeper 	<ul style="list-style-type: none"> Name list and contact to learning community sample (N=20)
Quantitative data collection	<ul style="list-style-type: none"> Identified SNA questions to use from published research Online SNA survey developed and disseminated to sample 	<ul style="list-style-type: none"> Online SNA survey developed Network data collection (N=19)
Quantitative data analysis	<ul style="list-style-type: none"> Use of UCINet to analyse network data collected 	<ul style="list-style-type: none"> Sociograms Centrality measures Descriptive statistics
Interviewee selection	<ul style="list-style-type: none"> Selecting interview respondents based on position 	<ul style="list-style-type: none"> Respondent selected (N=9)
Qualitative data collection	<ul style="list-style-type: none"> Identified interview questions Telephone interviews with selected respondents (N=7) 	<ul style="list-style-type: none"> Audio interview recording Interview transcripts
Qualitative data analysis	<ul style="list-style-type: none"> Analysis of qualitative data Coding and theme identification 	<ul style="list-style-type: none"> Thematic analysis Analytic generalisation
Integration of quantitative and qualitative results	<ul style="list-style-type: none"> Interpretation and explanation of quantitative and qualitative data 	<ul style="list-style-type: none"> Discussion Answer to research question

Table 3.4 Summary of thesis phases, procedures, and products

Before I determined my quantitative and qualitative methods and developed the data collection instruments, I laid out the research questions and identified what type of information was needed and how it would be collected (e.g. through specific survey/research questions). Doing so allowed me to focus the instruments on meeting the research questions and objectives. The interview questions in association with each research question can be found in the appendix.

Research question #1		
Question	Knowledge sought	Collection instrument
What can be learned from the collaborative learning practices of the Arabic language curriculum policy community in the UAE to explore the concept of PolILCs	a) Detailed description of learning community b) Characteristics of members c) Barriers to learning community	a) Interview questions b) SNA questionnaire (attribute data) c) Interview questions
Research question #2		
Question	Knowledge sought	Collection instrument
How and why do actors in the Arabic language curriculum policy community in the UAE engage in social learning, knowledge mobilisation, and research utilisation?	1. Description on interactions and interaction patterns 2. Description on motive to interact 3. Description on role of knowledge mobilisation and research	a) SNA questionnaire Interview questions b) Interview questions c) Interview questions
Research question #3		
What lessons can be learned in relation to furthering evidence-based policymaking in Arabic language curriculum policy in the UAE?	1. Description of factors that can promote policymaker's engagement with knowledge mobilisation and research utilisation	a) Interview questions

Table 3.5 Aligning research questions with data collection methods

3.4.1 Quantitative data collection

The main approach to quantitative data collection adopted here is the use of a standard Social Network Analysis (SNA) questionnaire. According to Scott (1991), if a researcher is not studying a natural group, then the boundary is determined by the research questions. In table 3.6. earlier in this section, I have used bounding features to determine my case, particularly, my interest in

understanding the policy community of Arabic Language curriculum in the UAE, which makes my target sample clearly identifiable.

Thus, I adopted a purposeful sampling technique in identifying research participants for the SNA questionnaire. Purposeful sampling means that the researcher selects individuals and sites for study because they can purposefully inform an understanding of the research problem and phenomenon (John et al., 2017). To identify participants, I contacted a member of the MOE Arabic language curriculum department who became the gatekeeper to my target sample, and who could identify a name roster.

The social network analysis approach adopts a roster choice method in which the researcher compiles a list of names identified within the network and respondents are asked to rate their interactions with each member (Borgatti et al., 2013). I was supplied with a roster of 20 policy community members that included their names, and email addresses. The sample was then contacted via email.

When surveys are used in network research, they generally ask respondents to report on their ties with others. Before drafting the survey questions, a decision had to be made on the nature of the questions and whether it was appropriate to use an open-ended format or close-ended relational questions. Due to the nature of the network explored which was a pre-identified network, a close-ended approach to questions for the SNA survey was chosen as the method of questioning.

There are two levels of data collection key to SNA, which are summed up within the characteristics of the nodes and the characteristics of the relationships between these nodes (Borgatti et al., 2013). The characteristics of the nodes—known as the ‘attributes’—are the features that distinguish actors, which can be categorical traits such as gender, or age. Relationship characteristics on the other hand refer to the features of ties and links between

nodes such as being friends, married, or co-workers. This study utilised the SNA questionnaire to collect the following data: 1) attribute data on participants (gender, nationality, job, year of experience); and 2) relational data on knowledge exchange ties, and professional ties.

To generate relational and attribute data in network analysis, the use of questionnaires, interviews, participant observation, and document analysis are prominent. However, researchers should combine methods to strengthen their analyses, and allow for comprehensive relational data (Scott, 1991). In this study, SNA was used to collect attribute and relational data which was then followed by in-depth interviews to extend the exploration of the network.

A starting point for forming my questionnaire was to view other SNA research questionnaires. I have therefore drawn survey questions from previously validated instruments (Daly and Yi-Hwa, 2014; Brown et al., 2016). The developed questionnaire consisted of two main questions related to: 1) attribute data and 2) professional network relational data (see appendix for the full questionnaire).

The SNA questionnaire was drafted in English first to enable early feedback from my supervisors. The survey was then sent to two different professional translators to translate it from English to Arabic. Translating the survey was necessary as the survey participants are primarily Arabic language speakers. Both translations were compared, and combined with one another to avoid meaning loss or confusion. Within translation, the main challenge was to find a correct Arabic word for 'learning communities' as the term is superficially understood, and only those who are aware of it from the English literature would grasp it. To address this challenge, a literal translation of the words 'learning' and 'community' was used followed by a bracket with the English word, and a short definition of it in Arabic. The second draft of the questionnaire in Arabic was then proofread by an external proof-reader—in education—who compared

it with the initial English document. After the Arabic SNA questionnaire was finalised, the survey was built and uploaded online.

3.4.1.1 Administering the survey

Participants were invited to participate via an email invitation that included a link to the survey; however, the email gave options of answering the survey face-to-face, over the phone, or digitally. Since the case of non-response in SNA research creates a critical obstacle, the choice of data collection format must consider the circumstances and nature of participants. The main considerations here in selecting the contact method were the participants' time constraints as curriculum decision-makers, the sensitivity of the SNA questionnaire, and my lack of connection with the participants. Thus, I had to consider a collection method that would take less time, have fewer sensitivity issues, and maximise the chances of getting a response.

Due to my awareness of the survey sensitivity, I adopted a combination of telephone and electronic collection methods. The electronic survey minimised handling errors and allowed the participants to answer without the interference of others, thus minimising sensitivity. Phone calls were used to further explain the survey to participants who wanted this input. Also, calls were made to participants who did not respond to the survey or email as a follow up in an attempt to establish rapport.

3.4.2 Quantitative data analysis

Three data analysis methods were applied for the SNA approach utilised in this study: descriptive statistics, network data measures, and sociograms. Each of the three analysis methods are adopted to conform to the study's stance of constructivism, where data is interpretively read. The goal of network analysis in its basic form is to provide calculation and metrics that describe the structure of a network (Borgatti et al., 2013). In the case of this

thesis, network measures for the policy community of Arabic curriculum policymakers will be used to provide a descriptive account of the network explored.

3.4.2.1 Handling the survey data

One of the key steps in any network analysis involves formatting the survey data for import into network analysis software. The software selected for network analysis is UCINET. The choice of UCINET is motivated by the availability of detailed literature—for example. Scott, (1991) and Borgatti et al., (2013)—that offers a detailed guide into network analysis. The first step in preparing the network data for software importing was to organise the dataset from the survey into a spreadsheet. The online survey tool, Survey Monkey enabled easy exporting of data in Excel format.

After downloading the data, I replaced the survey answers with numerical values 1=if a tie existed, 0=if a tie did not exist. This allowed me to translate the data from words to numbers, which overcame the need to translate the responses from Arabic to English. After replacing responses with their numerical value, I organised the attribute data into a data matrix, and the relational responses into adjacency matrices. A data matrix is better suited to perform sociograms, where attribute related data is organised in a case-by-variable matrix. Case-by-variable data organisation allows for the study of each attribute variable independently.

Adjacency matrices are a conceptually straightforward data format where rows and columns represent nodes or actors. For example, an entry in row c and column b represents a tie from c to b. The nodes inputted into the rows and columns must be in the same order. It is important to note that the direction of a tie goes from rows to columns, and not the other way around. An adjacency matrix has been created for all relational questions included in the case of this survey questions on the professional network and knowledge

exchanges. However, a separate spreadsheet was made for each of these sections according to the variable that was questioned to better understand the data. Table 3.7 below illustrates how the network data collected were organised. While I applied a standard SNA survey, for relational ties, I changed the questions to reflect the type of relations I was investigating.

Sheet #	Matrix variable
1	Attribute data
2	Professional network (reliable source of expertise)
3	Professional network (sought for general advice)
4	Professional network (sought for research-based advice)
5	Knowledge exchange (exchanged learning with)
6	Knowledge exchange (jointly conducted research-based searches with)
7	Knowledge exchange (collaborated to improve practice and policy with)

Table 3.6 Spreadsheet organisation

When organising the data into the relational matrices, it is important that the order of names in both the columns (actors asked about) and rows (actors who filled the survey) are identical. In the case of missing network participants who were listed in the survey but did not participate, a row must be added to represent their data. I began by arranging the columns and rows in alphabetical order, and inserted the missing participant's name. Data transformation is a crucial part of network analysis, and the researcher must be aware of how the data needs to be transformed for certain information to be found. Amongst the used data transformation techniques, the main technique I used is inputting missing data. What that meant was for each empty box in the matrices that was replaced with a numerical entry, the number '0' was inputted.

3.4.2.2 *Descriptive statistics*

To describe the basic features of data in quantitative analysis, descriptive statistics are used. The goal of this analysis approach is to describe 'what is' (Borg and Gall, 1989). Descriptive statistics are used to "organise and summarise data" (Holcomb, 2016: 2). For this thesis, descriptive statistics were used to:

- Describe the learning community members in terms of their attributes (e.g. job, nationality, gender, and years of experience)
- Describe the interactions in the professional and informal networks (e.g. sociogram)
- Describe place of actors in the network (e.g. network measures)

I have utilised descriptive statistics as a reporting mechanism. Consequently, an explanatory approach to the descriptive statistics was used, where the results were discussed and qualitatively interpreted.

3.4.2.3 *Network measures*

In its basic form, network theorising is based on the view of ties through which information flows (Borgatti et al., 2013). Network metrics provide measures whereby descriptions of the interaction and community structure can be identified, as well as be used to identify interview participants. There are two types of network measures, those related to the network itself (e.g. network measure), and those related to the actors (e.g. node measure). On the one hand, network measures describe the overall characteristics of the network in terms of interactions and ties. Node measures, on the other hand, can assist in showing the location of certain actors in the network, and show which actors are reported to be most central, and are found to share learning interactions with other members the most. Thus, node measures such as centrality, in/out degrees and reciprocity are able to identify active actors who share learning the most with other actors. Previous studies in networks have shown that when central players adopt certain behaviours, the likelihood of the rest of the network adopting similar behaviours is greater (Borgatti et al., 2013). Central actors are often found the most influential to the learning exchanges in the network due to their close connections and frequent interactions with other network members.

One of the three main research questions is to understand the nature of interaction and flows of knowledge and research in the policy community, as

well as which actors are found to interact with other actors the most. I have answered the first part of the question by using network measures, and the second part of the question by using node measures.

Analysis Level	Network Metric to be Measured	Interpretation in Social Networks	Utilisation of analysis in this thesis
Node	Degree centrality	A measure calculating how central actors are within the network	<ul style="list-style-type: none"> • To identify interview participants • To provide a description of actors interaction and exchanges in the policy community
	In/Out Degree	A measure of the incoming and outgoing ties between actors	
Network	Cohesion	A measure of how close each actor is to another	<ul style="list-style-type: none"> • To provide a description of the structural features of the policy community
	Reciprocity	A measure of how often a tie is reciprocated as a proportion of all existing ties	
	Density	The number of ties in a network as a percentage of all possible ties	

Table 3.7 Description of network and node measures synthesised from (Borgatti et al., 2013)

The use of node and network measures as indicated by table 3.8 above served to provide descriptive data on 1) network structure; and 2) actor location. In addition, node measures of degree centrality and in/out degree were used to determine interview participants. To answer one of the three main research questions on how and why policy community actors engage in learning; data from the most engaged (high degree centrality) and least engaged (low degree centrality) provided insight on engagement from two varying perspectives: why central actors engage in learning interactions and knowledge exchanges, and why non-central actors do they not engage.

3.4.2.4 Sociograms

Sociograms helps answer questions such as are all nodes connected? Are there subgroups ties to one another? Are there too many or too few network ties? Network conceptualisation is best utilised through the use of graphs;

however, graphs in network analysis do not refer to diagrams but mathematical objects (Borgatti et al., 2013). For this study, the Social Network Survey questions were set to measure multiple relational factors, each of which was represented with its own individual graph (see table 3.9).

Network Variable	Social Relation Measured
Professional	<ul style="list-style-type: none"> • Reliable source of expertise • Sought for research-based advice • Sought for general advice
Knowledge exchange	<ul style="list-style-type: none"> • Exchanged learning with • Jointly conducted research-based searches with • Collaborated to improve practice and policy with

Table 3.8 Social relations measured by SNA survey

Graphs are able to provide a visual representation that is helpful in qualitative explanations of SNA network data analysed. For this thesis however, the use of SNA sociograms will be to visualise the reported interactions between network actors and describe them. For graph development, NetDraw within UCINET was the software used. NetDraw allows also for an enhanced level of visualisation. Thus, NetDraw tools has been utilised to enhance the visualisation of data to support quantities evidence.

3.4.3 Qualitative data collection

The main qualitative data collected in this study was semi-structured interviews with community members. The pragmatic reason for adopting interviews as a method was to allow me to gain a deeper insight into a specific issue, in particular, for “understanding the lived, experience of other people and the meaning they make of that experience” (Seidman, 2006, p. 9). Initially, to gain a broad description of the community and what learning activities and processes it practiced; documents were sought from the gatekeeper contacted at the MOE, specifically, minutes of the community meetings where detailed information of the community interactions and practices were documented. Unfortunately, the administrators of the community at MOE did not keep

records or meeting minutes as it was not a standard practice in their meetings. However, to address this challenge, the interviews asked participants to explain the practices of the community, learning activities, and what it specifically intended to achieve (e.g. goals and objectives).

3.4.3.1 Sampling

The interview sample was identified after the collection and analysis of network data through the SNA process. The learning community network data from the SNA survey showed that the community was made up of policymakers, external language experts, and current practicing teachers. The analysis of network data allowed for node/actor measures to be calculated to demonstrate how connected they are to other actors in the network. This was then used to select interview participants. Actors who showed high, and low centrality measures and in/out degrees were interviewed to gain a deeper understanding of the different experiences of community members. Thus, from the 20-member network the following interviewees were sampled:

Criteria for selection	Invited sample (N=9)	Interviewed sample (N=7)
High centrality and in/out degree	3	3
Medium centrality and in/out degree	3	1
Low centrality and in/out degree	3	3

Table 3.11 Bounding strategy for interview participants

It is argued in qualitative research literature that the ideal sample is one where there is enough data to answer the research question (Bowen, 2008). The policy community I investigated in this study is made up of 20 actors, thus the intended interview sample was nearly half of the community. Yet, the purpose of this thesis is to build deeper understanding and exploration of learning and interaction. In such qualitative inquiries, the depth and breadth of

the data is often more important than the numbers (Burmeister and Aitken, 2012).

A prevailing concept for determining sample size in qualitative studies is saturation. The saturation point is the point in data analysis where the same themes reoccur, and additional sources of data do not provide new insight (Bowen, 2008). To identify if the saturation point had been met, I analysed every interview transcript for emerging themes line-by-line after there were conducted. Thus, I identified a saturation point after the 6th interview. Specifically, after I had interviewed at least one member of the three groupings of actors in the community. In addition, at the 6th interview enough data to answer the research question had been collected.

3.4.3.2 Instrument development: Interview questions

In seeking to understand a learning community in a policy setting closely the interview tool was critical to the exploration and answering of these inquiries. For this study, each interview lasted under an hour with sometimes an email follow up to confirm what was said and any points not understood. My approach was to use guided or semi-structured interviews where most questions were open-ended. In semi-structured interviews the researcher sets the outline for topics covered, but the responses from the participants determine the direction of the interview (Stuckey, 2013). For these semi-structured interviews, a clear set of questions was planned, which were based on the research questions (see appendix).

3.4.3.3 Administering the interviews

To administer the interviews, I undertook the following steps:

- Prepared interview questions and aligned them with research questions
- Identified interview participants from the SNA survey data by applying bounding strategy
- Prepared and sent interview invitation email

- Sent follow up interview email
- Conducted interview
- Transcribed data
- Categorised into themes

After preparing the interview questions, I sent them for translation from English to Arabic as my sample were primarily Arabic language speakers. After identifying interview participants, I drafted an interview invitation email, which included a 1) study introduction letter, 2) interview questions, and 3) a consent form. The email indicated a preference for a telephone interview as all the participants came from different regions in the UAE, and for convenience it was easier to conduct over the phone due to their schedules. The interview questions were not piloted, but a draft of the questions were sent for review by two of the high central actors for comments.

Participant	Date	Duration of Call
1 (High centrality)	11/01/2017	1 hour 15 minutes
2 (High centrality)	13/01/2017	45 minutes
3 (High centrality)	13/01/2017	50 minutes
4 (Medium centrality)	20/08/2018	57 minutes
5 (Low centrality)	21/08/2018	37 minutes
6 (Low centrality)	27/08/2018	42 minutes
7 (Low centrality)	01/09/2018	55 minutes

Table 3.12 Interview schedule for semi-structure phone interviews

Initially, my interview strategy was to only include high centrality members. However, I could then only select three participants to interview. This was too weak of an attempt to gain insight into the research question, therefore I attempted another round of interviews and a change in the bounding strategy. As a result, six additional participants were invited and four additional interviews were conducted. Each conversation was recorded, transcribed, analysed, and then translated. Collected data was thematically analysed for trends and patterns through the use of qualitative software analysis tools (NVivo).

3.4.4 Qualitative data analysis

Two main methods are applied for qualitative data analysis in this study: thematic analysis and analytical generalisation. However, before going on to discuss in-depth these two approaches, I take a step back to consider the process of handling the interview data first. Managing and organising qualitative data is the first step to begin the process of analysis (Creswell and Poth, 2017). As my interviews were audio recorded, transcription took place digitally for each of the interviews undertaken. After transcribing the data digitally in Arabic language, it was sent for translation into English to a professional translator and then sent for review by a second translator for accuracy. The translated interview in English language was stored electronically in a word document format.

3.4.4.1 Thematic analysis

Thematic analysis is the process of organising data, conducting an initial read-through of the data base, and coding and organising themes (Creswell and Poth, 2017). Coding as a process requires making sense of the collected data and aggregating the text into smaller categories of information (Creswell and Poth, 2017). Themes are broad units of information that consist of several codes.

My coding process by utilising the four main research question categories as initial codes: the learning community, learning process, interaction process, evidence and research use. Thus, all data for each interview was arranged under the following headings to maintain consistency, and ability to read the data in-depth.

The themes for this study were also aided empirically as I adopted an inductive approach to analysing the interview data, guided by literature where this provided a framework for analysing the data, such as emerging themes that are likely to be found in answering the research questions (Mullen and

Ramirez, 2006). This approach ultimately allowed me to interpret interview data in light of literature evidence (Rubin and Babbie, 2007). In inductive reasoning, the process moves from specific observations to broader generalisation and theory. My approach matches Mason's (2002) definition of themes/code where "theory, data generation and data analysis are developed simultaneously in a dialectical process" (p. 180). Hence, my approach of moving back and forth between analysing data, constructing codes, and using the literature and theory.

3.4.4.2 Analytical generalisation

According to the literature, the concept of qualitative generalisation is a result of authors denying the inability of case study to supply means for scientific development (Flyvbjerg, 2006). Instead, cases, with the help of in-depth analytic investigation, are able to generalize to other circumstances and situations and not populations (Yin, 2012). Thorne et. al. (2009) explains the concept of analytic generalisation as follows:

Findings drawn from interpretive description are not meant to reflect representativeness of the population; rather, when articulated in a manner that is authentic and credible to the reader, they can reflect valid descriptions of sufficient richness and depth that their products warrant a degree of generalizability in relation to a field of understanding. (p. 1385)

Hence, claims made when analytical generalisation is applied from a case are considered theoretically grounded, and serve as a tool to make statements about similar situations to the one studied (Yin, 2012). In this study, I therefore collected descriptive data on the emerging concept of PoliLCs which will serve as theoretical grounding for future studies.

3.5 Validity and reliability

In case study research, there are four types of validity to consider, and in turn to apply to, judge the quality of research design. The four criteria are a common test for most of social science methods, and have been applied to

guide this study in maintaining quality (Yin, 1984; Kidder and Judd, 1986). The four tests are the following: Construct validity—identifying operational measures for the concepts studied—, internal validity—seeking to establish a casual relationship—, external validity—showing how findings can be generalised—, and reliability—demonstrating that the operations of a study such as its data collection procedures can be repeated with the same results— (Yin, 1984; Kidder and Judd, 1986). I therefore considered the four types of validity in this research design.

Construct validity concerns developing operational measures to collect data in attempts to avoid individual subjectivity. In order to do so, Yin (1984) argues, researchers must first define specific concepts for research participants. For this study, PoliLCs was defined for the participants as well as the following operational measures to match the concept: social interaction, learning, knowledge utilisation, and research use.

Internal validity is concerned with making inferences. In exploratory case studies such as this, the aim is not to make interference. Instead, the goal is to build understandings which are not related to a casual situation (Yin, 1984). Thus, strategies of pattern matching and explanation building have been utilised in an exploratory manner to build greater understanding of policymakers' learning and interaction.

Criteria	Case study tactic	Phase in research where tactic is addressed	Application to thesis
Construct validity	<ul style="list-style-type: none"> • Use multiple sources of evidence • Have key informants review draft case study report 	Data collection Composition	<ul style="list-style-type: none"> • Data collected from multiple members of the community <ul style="list-style-type: none"> - Policymakers - Language experts - Language practitioners • Participating members review the case study report • Definition of key terms and concepts provided
Internal validity	<ul style="list-style-type: none"> • Do pattern matching • Do explanation building • Address rival explanations • Use logic models 	Data analysis	<ul style="list-style-type: none"> • Pattern matching • Explanation building • Address rival explanations
External validity	<ul style="list-style-type: none"> • Use theory in single-case studies • Use replication logic in multiple-case studies 	Research design	<ul style="list-style-type: none"> • Use of theory through application of analytical generalisation
Reliability	<ul style="list-style-type: none"> • Use case study protocol • Develop case study database • Maintain a chain of evidence 	Data collection and composition	<ul style="list-style-type: none"> • Detailed research phases and steps in collecting qualitative and quantitative data • Developed a case study database of codes and themes • Maintain a chain of evidence in discussion chapter

Table 3.13 Application of case study tactics for four design test adapted from Yin (1984, p.42).

External validity refers to the extent to which the case study findings are generalisable beyond the immediate study. While the sample of this case study is actors involved in Arabic Language curriculum development and policymaking in the United Arab Emirates, generalisation is possible to other communities in a policy context where similar settings of interaction are present. Thus, analytical generalisation as discussed above in p. 174 is

adopted to achieve external validity. Reliability refers to the likelihood that if the same research was followed using the same procedures again, similar results would be identified. For this test to be administered, I have outlined a detailed account of the qualitative and quantitative data collection and analysis.

3.5.1 Interviews

Issues with reliability in the selection of interviews is commonplace, and are mainly concerned with variations between how each interview is conducted. To address this within this study, the semi-structured interviews were guided by identical questions following the same order. In a meta-analysis by Conway et al. (1995), problems with interview reliability were minimised by a number of interventions, most prominently, one-to-one interviews with standardised questions. Thus, in my one-to-one interviews with standardised questions, interview data was likely to exhibit reliability.

Triangulation provides an important form of ensuring validity of case study research. According to Patton (2015), there are four types of triangulation:

- Triangulation of data sources (data triangulation)
- Triangulation of evaluators (investigator triangulation)
- Triangulation of perspective to the same data (theory triangulation)
- Triangulation of methods (methodological triangulation)

In my thesis, I applied data and theory triangulation in my data collection and analysis phases. For data triangulation, the sources within the community differed in categories, as in I interviewed policymakers, external experts, and practitioners. Thus, triangulating data sources. In regard to theory triangulation, the analytical generalisation approach in data analysis triangulates research findings with the theory and literature review. Thus, allowing for a triangulation of perspectives to the same data and cross-analysis of findings and theory. While I do use multiple methods from interviews to survey questionnaire, these

are not attempts to triangulate as they do not answer the same question and differ in purpose.

3.5.2 Network analysis survey

Key to the successful repetition of test reliability is what Scott and Morrison (2006) refer to as the assumption that the object being measured has not changed. In the context of network research, if the procedure was repeated identically but at another time it is most likely that the research data would be affected by change. A trusted instrument in assessing reliability is the test-retest procedure (Briggs et al., 2012). The test retest procedure refers to piloting the test twice at different times on the same person or group, and then the researchers compare the answers in search of variances. Cross-checking the findings from the retest with the initial test is a method of triangulation, and increases the confidence in the instrument designed.

For reliability purposes, the network survey of this thesis has been piloted on two work colleagues who are part of a non-for-profit philanthropic foundation that works within Education, Health, Art, Culture, and Heritage in the United Arab Emirates. The survey was taken twice by the sample with a week between each of the tests to compare the results. The purpose of doing so was to see if there is great difference in the reported answers between the two pilots.

Comparing the two pilots, these responses were identical and no differences were noted. Consequently, the survey pilot demonstrated strong internal survey validity where variance across responses proved to be minor. In cases where variance was identified, it did not significantly alter the representation of the data, or what the data tries to suggest. In addition, the survey used in this study was inspired by a published instrument that has been previously validated (Daly and Yi-Hwa, 2014; Brown et al., 2016)

Data management errors impact the reliability and validity of network research greatly. These errors are mainly a result of data entry, transcription, translation, and coding. Data errors are extremely problematic as they influence the trustworthiness of the result, and the accuracy of network measures. Other data management errors that occur in network research are data aggregation and formatting errors. Data aggregation and formatting errors are more apparent in secondary network data collection. These errors occur when the researcher makes a decision about the scale of aggregating the secondary network data found, or when data with formatting technical errors are used. To address data management error, data collection took place through Survey Monkey that matched the participants' answers accurately. However, when working on data analysis on UCINET, I double-checked the inputted data to confirm accuracy. Technical expertise in the use of network analysis software is important for data errors to be avoided.

3.5.3 Translation, validity, and reliability

The role of translation on the validity and reliability of this research played a critical role, specifically as data collection and analysis was conducted in Arabic. According to Birbili (2000:1) "collecting data in one language and presenting the findings in another involves researchers taking translation-related decisions that have a direct impact on the validity of the research and its report". These translation decisions are often affected by factors including a translator's linguistic capacity and the researcher's knowledge of culture. In situations where translation is an essential research component, the procedures and decisions taken when translating must be explained. In explaining the translation procedure adopted here to maintain validity, I will discuss the main challenges of translation relevant to this study, and strategies suggested to address them. Translation challenges are present in multiple

stages of my research design including questionnaires, data collection, transcription, and analysis.

As my survey used a previously validated questionnaire in English, the first use of translation was translating survey questions from English to Arabic. The second use of translation was drafting interview questions in English for the approval of the University's ethics committee, before translating it into Arabic. The third use of translation was interview data from Arabic to English. Survey data, as discussed earlier, were captured numerically.

In an insightful book titled *Translating Questionnaires and Other Research Instruments*, Behling and Law (2000) present an in-depth account of the translation of survey instruments. Behling and Law (2000) put forward three main practical problems anticipated when translating questionnaires that they refer to as the lack of semantic, conceptual, and normative equivalencies. Lack of semantic equivalence across languages is seen as the challenge of identifying words or phrases in the target language that match those of the source language. The lack of conceptual equivalency is related to challenges that arise from operationalizing constructs where these concepts have certain meanings to members of the source culture. The lack of normative equivalencies' refers to the distinct aspect of each society's norms that influences behaviour. Amongst the three instrumental translation challenges, the lack of semantic equivalency was the main challenge I faced in the research design. In the survey, this challenge was present when trying to identify the Arabic words for 'policy learning communities', which were the foundational concept of the study. As a concept, the phrase lacked familiarity in the Arabic literature making it a challenge to sufficiently identify words equivalent to it.

A key technique that the literature identifies to address the semantic equivalency challenge is the parallel blind technique. Werner and Campbell (1970) identify the parallel blind technique to explain the process whereby two

translators individually prepare versions of the instrument translation draft, and then compare the differences. According to Guthery and Lowe (1991), this technique is faster, more practical, and allows for researcher control. When translating this study's survey instrument, interview questions, and interview results, I adopted a parallel blind technique for multiple purposes.

Consequently, to achieve validity and reliability when translating the survey and interview instruments, it was critical that methods to support translations were employed. As discussed above, this study utilised the parallel blind technique method for survey and interview translation. The use of two professional translators provided added validation to the survey instrument (Temple, 2008). Additionally, the challenge this research faced in trying to translate 'policy learning communities' was aided by the discussion between the translators. As a result, a decision was made to directly translate it and add the English word for the term after mentioning it for the first time in the survey as a means of clarification. After the translation draft was in its final stages, the draft was shared with an external proof-reader in the field for general comments and edits. Finally, I followed Van Nes et al. (2010) in their recommendation of staying as much as possible within the source language, Arabic, in the data collection and analysis phase to maintain validity.

3.6 Ethical Considerations

This research was conducted according to the British Educational Research Association (BERA) ethics and guidelines to educational research, and the Data Protection Act of 1998. Participants were given the right to voluntarily participate under the voluntary informed consent of BERA's ethics and guidelines. As I have discussed in this chapter, for the survey participants, the invitation email included participants' rights such as withdrawing from the research at any time without giving a reason, and keeping information

confidential. If at any point an actor withdraws, all data provided by the actor will be deleted and not used for analysis. In the interviews, I relayed participants' right to gain verbal consent, and explained that I would record the interview for transcription purposes.

In this study, both survey and interview data maintain anonymity where participants' names were disassociated with their responses to maintain confidentiality. However, the survey collection tool presented an anonymity challenge during the first stage of data collection. The use of SNA as an instrument entails specific ethical challenges, mainly that participants' anonymity is impossible when collecting data for full network research (Borgatti et al., 2013). This challenge is primarily present when conducting full network analyses where participants are required to identify themselves and those they interact with to be able to map out the network. Hence, it is essential that participant names be used when answering the questionnaire, and names of other individuals in the network be listed.

In a special issue on ethical considerations in social network analysis, Klovdahl (2005) describes a number of assumptions to protect participants in health social network research and these include:

- Effective means for protecting the confidentiality of the research data, including the necessary hardware, software, and data handling protocols, would be in place and would be used;
- Data would be 'de-identified' at the earliest date possible;
- No identifying information would be shared outside the project without approval for any proposed sharing;
- No data retained beyond the end of a project would contain information permitting the identification of any participant or network associate.

Hence, to adhere to the ethical considerations above, survey participants were given an introductory letter online along with the consent form (see Appendix) that clearly explained the study, and each participant's rights and responsibilities.

In organisational research, the visual data of a network survey presents another dimension of organisational members predicting the identity of participants (nodes). The challenge of loss of anonymity in organisational research is not similar to anonymity in data collection. Instead, it refers to the ability of network participants in an organisation to deduce the identity of individual participants by only viewing the diagrams until the whole network is revealed. Together, these challenges can impose participant risk if the context of the survey is sensitive. However, in the case of this research sample, risks from deducing respondents' identities are very limited, particularly as the sample has similarly attributed members (e.g. attribute by department/team), and the nodes and ties cannot be figured out if participants' names are kept anonymous.

3.6.1.1 Data handling

The data for this thesis was collected through an electronic survey, and telephone interviews. During the research, there was no physical data, and all the electronic data were kept secure, accessible only to the researcher. The data collected through Survey Monkey were downloaded on a password protected, privately owned laptop after all participants completed the survey. The electronic data remained on Survey Monkey during data collection, and will be deleted after the study is completed. Thus, the digital data collection will abide by Survey Monkey's privacy policy, which follows EU data protection guidelines. The audio recordings of interviews remained in electronic format in a secure password locked file on a personal laptop. Both survey and interview electronic data will be stored until the completion of the thesis. After the submitting of the final draft, online raw data will be deleted from all digitally saved locations and hard copy personal information will be shredded.

Chapter three began by discussing the research aims and objectives of this research to inform choices of epistemology and ontology. An engagement with

epistemology and ontology positioned this research in a social constructivist paradigm, in which the case study method was identified most appropriate in my research exploration. The chapter then discussed fully the methodological design of this study, both qualitative and quantitative instruments used, with an ultimately qualitative aim of deeper understanding of policy community practices and learning. The chapter has also discussed ethical concerns, and addressed key issues of validity and reliability in detail. In the next chapter, the findings from the application of this thesis methodology and methods is reported under themes that answer the research questions. The interview data is the main source for information reported in the next chapter, with brief reporting from the SNA survey data.

4 Findings

This chapter discusses the findings from the social network survey and interviews conducted within the Arabic Language Curriculum Policy Community at the Ministry of Education in the UAE. The MOE is the driving force—both in the creation and implementation—of Arabic language curriculum development and policy in the country. The MOE as a federal entity is responsible for the development of Arabic curriculum and policy for the country as a whole, and local authorities are responsible for supporting and developing learning outcomes for the Arabic curriculum in each of the seven emirates. Participation in the Arabic language curriculum policy community was managed and overseen by the MOE. MOE created the community and purposefully invited actors to join from multiple external organisations, who together, created a diverse set of expertise. Subject experts, Arabic language teachers, and policy and curriculum experts all joined together to alter and improve the policies and decisions related to the Arabic language curriculum in the UAE.

The findings section is organised according four main headings that align with the three research questions (in bold), and sub-headings to address the questions in detail (in italic):

- **Description of the policy community:** *demographic characteristics, purpose, and modes of interaction.*
- **Description of the interaction between community actors:** *Visualisation on interaction, factors motivating interaction, and factors limiting interaction.*
- **Description of the learning between community actors:** *Individual and group learning, learning resources available, and factors motivating engagement with learning.*

- **Description of evidence and research use:** *Role of evidence in decision-making, factors motivating evidence and research utilisation, and barriers to evidence utilisation.*

The findings in this chapter are a combination of interview data in the main, and secondarily, survey data. The survey drew demographic and description information of participants, as well as data on who interacts with who in the community for advice and knowledge. The interviews reported descriptive data on the practices of the policy community in terms of learning, interaction, and knowledge utilisation. I specifically rely on the use of direct quotation of interview participants to eliminate researcher bias, and offer direct descriptions. For the first section on describing the policy community, interviewees are quoted in no order but thematically organised.

4.1 Description of Arabic Language Curriculum Policy

Community

The Ministry of Education in the United Arab Emirates oversees the development and implementation of the Arabic language curriculum and policy from primary to secondary education. The Ministry is involved in the oversight of the Arabic language curriculum policy community that includes internal actors of the curriculum department within the Ministry, Arabic language subject experts, actors from UAE University Arabic department (UAEU), and external Arabic language experts. The policy community is led and managed by two Ministry members MP3 and MS1, and one external expert ES2, who has been working with the MOE curriculum department for the past 10 years. The community was established in 2014 by MOE's curriculum department to support curriculum and policy development of the Arabic language subject that is taught from primary to secondary grades in all schools in the country, and has continued to meet and work collectively annually since then.

This section focuses mainly on describing the policy community to provide a foundation for understanding their composition and work which will be analysed in more detail in the next chapter. Hence, I present the findings on participants' demographics, the vision and purpose of the community, the modes of interaction between community actors, and the joint action that the community is involved in. The section describes how and why community members interact to address one of the key research questions on interaction.

4.1.1 Participants' demographics

The sample size of my targeted network within the MOE was a total of 21 actors, of which 19 actors completed the survey achieved a high response rate of 90%. In network research, missing data is seen as a major constraint (Borgatti et al., 2013). However, a response rate above 70% is considered sufficient in supporting the reliability and validity of the network data collected. All participants were invited to participate in the survey electronically, and the 19 participating actors filled in the electronic survey sent to them. The survey data determined which actors were selected for interviewing. A total of nine actors were invited to be interviewed, and seven participated. Table 4.1 next presents a profile on all survey participating actors.

Code	Job Title	Gender	Nationality	Organisation	Years of Experience				Degree
					Current position	Curriculum development	Curriculum policy	Teaching	
Polycymakers									
MP2	Senior grades manager	M	UAE	MOE	1.5	1.5	1.5	8	Doctorate
MP3	Director of Standards	F	UAE		2	13	10	10	Bachelors
LP1	Policy Section Manager	F	UAE	Local Authority	1	0	1	6	Masters
LP2	Curriculum Division Manager	F	UAE		6	1	5	4	Doctorate
LP3	Curriculum specialist	F	UAE		1	0	0	18	Bachelors
LP4	Policy specialist	F	Arab		2	0	0	0	Masters
Subject Experts									
MS1	Arabic language advisor	M	Arab	MOE	18	9	9	23	Bachelors
MS2	Arabic language supervisor 9-12 curriculum	M	Arab		3	3	0	20	Bachelors
LS1	Quality improvement specialist	F	Arab	Local Authority	15	2	1	12	Bachelors
LS2	Head of Arabic Curriculum	M	UAE		2	2	2	7	Bachelors
US1	Professor	M	Arab	UAEU	1	2	2	28	Doctorate
US2	Associate Professor	M	Arab		1	1	NA	15	Doctorate
US3	Professor	M	Arab		1	1	1	20	Doctorate
ES2	Associate Professor	F	UAE	External Expert	5	5	NA	10	Doctorate
ES2	Language Expert	F	UAE		1	18	15	20	Doctorate
Teachers									
ST1	Arabic language teacher	F	UAE	Public Schools	8	1	NA	8	Masters
ST2	Arabic language teacher	F	UAE		1	NA	NA	NA	Bachelors
ST3	Senior grades teacher	M	Arab		25	NA	NA	25	Bachelors
ST4	Arabic language teacher	F	UAE		1	1	3	18	Bachelors

Table 4.1 Demographic of survey participants

4.1.1.1 Profile on actors by organisational affiliation

The table above describes multiple attribute-related data on survey participants that include organization, gender, qualification, nationality, and employment status. The attribute data were solely collected using the SNA survey administered online. To maintain anonymity, actor names have been replaced with an alphanumerical digit that comprises a letter for the organisation they belong to, a letter to the type of expertise they are involved for, and a randomly assigned number. Hence, participants code was given according to the following rules:

Organisation	Expertise
M = Ministry of Education	P = Policy expertise
S = Schools	S = Subject expertise
L = Local Authority	T = Teaching expertise
E = External Expert	
U = University	

Table 4.2 Rule to assign code for participants

For example, MS2 means that the participant is an employee at MOE and involved in this policy community for their subject expertise. As such, looking at the demographics table from the survey collected data, the policy community involved actors from the MOE, public schools, universities, local authorities, and external experts, as indicated by MS1:

“The policy community includes Arabic language experts, teachers, local authority representatives, and policymakers at MOE who are brought together by MOE to work together for six months”. (MS1, H, 2018)

The local authority involved in the community is the Abu Dhabi Education Council of the Emirate of Abu Dhabi only. In the UAE, there are seven local authorities across the country. Yet, only the Abu Dhabi local authority is part of this policy community due to its work within its jurisdiction, furthering initiatives for supporting the Arabic language curriculum on a local level. According to LP2:

“We develop learning outcomes and teacher guides for the Arabic language subject across Abu Dhabi schools in accordance to MOE standards. We also co-develop text books with MOE when needed”. (LP2, L, 2017)

The method by which participants in the policy community were selected is not random. As MOE initiates the community effort, actors are purposively selected as MP3 reports:

“The MOE decides and selects members. New actors are normally recommended by the existing community actors.”. (MP3, 2017)

There were four main organisations that actors of the community are associated with: the MOE, UAE University, public schools, and Abu Dhabi Education Council. Within each of these organisational groupings, different member expertise was present.

Organisation	Expertise	Actors
MOE	Policy and subject	MP2, MP3, MS1, MS2
Abu Dhabi Education Council	Policy and subject	LP1, LP2, LP3, LP4, LS1, and LS2
UAE University	Subject	US1, US2, and US3
Public Schools	Teaching	ST1, ST2, ST3, and ST4
No affiliation	Subject	ES2 and ES2

Table 4.3 Actors by organization affiliation and expertise

Policy experts were centrally found within the government, namely within the MOE at the country level and within the education local authority of Abu Dhabi at the local level. The subject experts were found mainly within UAEU, and the full teaching experts sample of this community was affiliated with public schools. Two external subject experts were also part of the community. External subject experts refer to language experts who are not fully employed by the MOE. This means that they are associated with another organisation such as a university or are not part of any organisation, and contribute to the community on a part-time basis.

4.1.1.2 *Profile on policy community actors by experience and educational attainment*

The policy community included actors who were diverse in terms of their experiences, and qualifications. The survey collected data on the years of experience of the participants for the following expertise: current position, curriculum development, policy development, and teaching. As such, table 4.4 below includes a summary of the participants' experiences.

Years of Experience	Current position		Curriculum development		Curriculum policy		Teaching	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1-3 years	13	68%	10	77%	7	64%	-	-
4-10 years	3	16%	0	-	3	27%	7	41%
11-15 years	1	5%	2	15%	1	9%	2	12%
16 years+	2	11%	1	8%	-	-	8	47%
Total	19	100%	13	100%	11	100%	17	100%

Table 4.4 Summary of participants by years of experience

Table 4.4 above is a representation of the years of experience amongst the network actors in teaching, policy development, and curriculum development. The majority of community actors have been at their current positions for more than a year. From the three types of expertise measured by the SNA survey, teaching expertise was the most common amongst the community actors, where the majority had teaching experience ranging from 4 to 25 years. The majority of policy community actors through the survey data reported relatively little curriculum development and curriculum policy experience, where only 4 actors out of the 19 had 10+ experience in developing curriculum and policy. This scenario was reinforced in the interview data where two of the teachers interviewed ST2 and ST1 reported the following:

“As a teacher, I started with no background knowledge in curriculum and policy development. I came in with zero past experience in these two areas”.
(ST2, M, 2018)

“Before joining the community, I had a lot of experience in teaching the Arabic language to primary and secondary children. However, this was the first time I become involved in making choices regarding the curriculum and its policies.” (ST1, 2018)

There are four types of expertise within the community: subject, curriculum, policymaking, and teaching. Subject experts are actors whose main expertise is the Arabic language, and where they have studied the subject at a postgraduate level. All UAEU subject experts, and the external experts have studied Arabic language at the doctoral level (see table 4.5).

Qualification	Number of policy community actors with specified qualification
Doctorate	7
Masters	3
Bachelors	9

Table 4.5 Level of qualifications reported of policy community actors

Curriculum and policymaking expertise refers to actors who have previous knowledge in both areas through their involvement with MOE previously. These actors have previously worked on developing both curriculum and policy, and hence, have developed their expertise within these areas. Teaching expertise refers to schoolteachers who have been teaching the Arabic language subject in public schools. All the policy community actors have qualifications that range from undergraduate to graduate degrees.

4.1.1.3 Selection of interview actors

The selection strategy of the interview participants was determined by a quantitative approach. The SNA survey collected interaction data from 19 participants that focused on identifying two groups of ties: Advice ties and knowledge exchange ties. On applying network measures on the network data of the 19 policy community survey participants, the target sample for interviews was

identified. The target sample was initially nine participants who were found according to the UCINET centrality measure to have the highest, lowest, and average number of advice and knowledge exchange ties in the community. Two participants from the 19, LP3 and LP4 did not report interaction data as they were not immediately involved with the policy community. According to an interview with LP2, who works with both LP3 and LP4, it was identified that:

“Not everyone in the Arabic curriculum team at the local authority interacts with MOE community based on the relationship between the two organisations.” (LP2, 2017)

Data on centrality from the advice ties and knowledge exchange ties were used to find the interview sample based on the assumption that these two ties could indicate the degree to which actors are perceived by their peers to be involved in seeking information (advice), and/or exchanging knowledge. Advice ties measured three interactions: 1) actor sought as a source of expertise, 2) actor sought for research advice; and 3) actor sought for general advice. Where in knowledge exchange ties measured three interactions: 1) Exchanges of curriculum materials, 2) Joint inquiry to research; and 3) Collaboration to evaluate curriculum.

There were two measures that I looked at within the data on the advice and knowledge exchange information: actors' OutDegree and InDegree. The OutDegree refers to the number of outgoing interactions of an actor for a tie. For instance, if actor ES2 reported that they sought research advice from actors US1, US2 and US3, that meant he/she would have 3 connections for the research advice tie. OutDegree was reported by an actor regarding the connections he/she identified with another actor. InDegree however referred to the number of incoming interactions of an actor for a tie. InDegree was reported from the other actor's interaction with the actor examined, where it was an incoming relation. In the same example I gave above on ES2, for instance, only US2 and US3 reported that they

'sought out' ES2 for research advice. This means that ES2 had two incoming ties, also known as InDegree.

Table 4.6 below summarises the number of all OutDegree and InDegree for all survey participants for both the three advice and three knowledge exchange interaction ties mentioned above. Upon summarising the data in the table, I identified the average total score for the OutDegree and InDegree and determined four high, two medium, and four low centrality actors. The average score for both degrees is around 25 relations; as such, the following actors were invited to be interviewed: MP3, MS1, ES2, US1 (High centrality/ Above average); ST2 (Medium centrality/ Average), and ST1, LS1, LP1, LP2 (Low Centrality/ Below average). From the invited, the highlighted actors in the table participated. For the next section of this chapter, I have included after the code of every participant's quotations, the letters H for high centrality participants, M for medium centrality participants, and L for low centrality participants.

Centrality	Actor	OutDeg	Indeg	Invited	Interviewed
High	MP3	69	51	YES	YES
	MS1	53	43	YES	YES
	ES2	53	72	YES	YES
	US1	42	19	YES	YES
	MS2	41	45	NO	NO
	US2	38	28	NO	NO
	US3	30	30	NO	NO
Medium	ST2	24	27	YES	YES
	MP2	22	26	YES	NO
Low	ES2	17	37	NO	NO
	ST3	17	22	NO	NO
	LS2	16	10	YES	NO
	ST1	15	22	NO	YES
	LS1	11	19	NO	NO
	LP1	10	8	YES	NO
	LP2	10	13	YES	YES
	ST4	9	6	YES	YES
	LP3	1	0	NO	NO
	LP4	0	0	NO	NO

Table 4.6 Survey participants centrality measures for advice and knowledge exchange ties

4.1.2 Purpose and joint action

The central goal of the Arabic language curriculum policy community, according to the interviewed actors, is primarily to develop policy and standards for the Arabic language curriculum, and secondarily, to continuously edit and improve the curriculum. According to both MS1 and ST1, the purpose that unites

the community is the joint work on editing and improving the curriculum every academic year.

The community actors with their diverse backgrounds are involved in joint curriculum and policy development processes for the Arabic language curriculum. Hence, an aspect of the work was identifying ways in which the learning outcomes of the Arabic language curriculum could be improved.

The interviews with the policy community actors described the joint action process that brought together the curriculum policy community, which is a process designed and administered by the policy community administrators at MOE. The process started with three-day face-to-face meetings at the MOE with all the actors involved, described here by ST2 and ES2:

“The process of curriculum policy development began with initial face to face meetings to understand what is required from the community members, and what methodology will be adopted to set the curriculum and policy.” (ST2, 2018)

“In the beginning of the academic year where the community begins its work together, there are initial meetings conducted over three days to discuss vision and target.” (ES2, 2017)

After the initial three-day meetings, an agreement on the vision and target of the community was reached. When that happened, the community together formed a task list and divided it between the members. Members worked in groups of mixed expertise where teachers were put together with at least one subject expert and one policy expert. The task list was divided into four phases: the collection of new curriculum content, evaluating the content selected, creating lesson plans, piloting lessons and reflecting. According to an MOE policymaker interviewed:

“After having a clear document on the expectation each actor is designated to explore a specific area of the curriculum and policy explored within a group. The group includes a subject expert and a policy expert.” (MP3, 2017)

Similar views were shared by actors ST1 and ST2, who were involved in the community as Arabic language teachers:

“The community started with a clear vision, and groups with designated specific tasks. In each group, teachers worked with subject experts and policymakers.” (ST1, L, 2018)

“The first task about the group agrees on vision is to collect new curriculum content that is aligned with curriculum goals. This task is done by all MOE community members, the teachers and the subject experts. (ST2, 2018)

The collection of curriculum content which involved collecting reading, writing, and grammar materials happened individually where each actor within a group would start an individual search, and then come back to the group to share it. The group, which included teachers, subject experts, and a policymaking expert, would then come together to evaluate the content that had been shared.

“The content collected is filtered according to two features: 1) its relevancy to achieving curriculum goals set by MOE; and 2) If its suitable to the context.” (ST2, 2018)

While the final decision was taken by the policymakers, the policymakers purposefully wanted all actors to engage in collaborative evaluation of the content:

“After each actor within their group comes back with the content they collected, they share suggestions and comments on it with their group.” (MP3, 2017)

The third and fourth phases of the communities’ joint work was the development of instructional plans, and piloting these for assessment:

“Once the instructional plans are ready for the new content, we test the lesson out in selected schools and observe these lessons for feedback. We invite school leaders, parents, and teachers to observe these lessons and give direct feedback. We take these feedbacks we received and take them back to the policymakers within the curriculum community.” (US1, 2018)

The four phases of curriculum content selection, evaluation, lesson plan creation, and piloting lessons reported the joint action practices that took place. These phases explain the main tasks that the Arabic language curriculum policy community has been established to undertake. Throughout the four phases that the community went through, modes of interaction varied. I discuss next the reported modes of interaction used by the community members, and what was identified as most useful.

4.1.3 Modes of interaction

The policy community started meeting at the start of the academic year and worked from September to February annually. Multiple modes of interaction were used by the MOE to sustain the communication and interaction between the policy community members (see table 4.7). These meetings are organised by the administrators of the policy community at MOE. The three-day meeting is schedules ahead of the start of the year, and the monthly meetings are decided upon monthly.

Mode of interaction	Number of interviewees mentioning this mode of interaction
Three day face-to-face meeting	7
Monthly group meetings	5
Email exchanges	7
Phone calls	7
Phone chat group	7

Table 4.7 Modes of interaction calculation by interviewees mentions

Members of the community reported these different forms of initial and ongoing meetings and interactions mentioned in table 4.7. Yet, it was reported that meetings decreased after the initial three-day meeting to tight schedules. Attempts were made to keep frequent interaction through phone chat groups and phone calls.

It can be seen here that the mode of interaction was dependent on the task given to the members of the group. In US1's account of the mode of interaction, this was associated with the actor role in the community:

"In my case, it began with phone conversations with other community members to introduce one another, and was followed by emails that included the tasks that was divided amongst the community members." (US1, 2018)

There is a consensus amongst interviewed participants that face-to-face meetings were more effective in getting work done, and collaborating. From the modes of interaction reported, face-to-face interactions are found to be more helpful than others are. Yet, with the limited time available to bring together the policy community members for face-to-face interactions, digital forms of interactions such as phone calls, emails, and messaging are used. The next section will add to the understanding of interaction by provide information on these interactions, and identifying factors that support and hinder them.

4.2 Description of Interaction

To describe the interactions of the policy community, two methods were used. First, the SNA survey data provided visualisation of these interactions for the advice ties, knowledge ties, and informal network ties. The visualisations will be described next to provide a snapshot of who was interacting with whom. Second, the one-on-one semi-structured interviews were used to understand the interactions of the policy community more closely. Questions to understand what motivated and limited these interactions were asked of the interview participants. In this section, these factors are discussed. The answers on how is reflected in section 4.1 in addition to section 4.2.1. The why is reflected in sections 4.2.2 and 4.2.3.

4.2.1 Network visualisation on interaction

Network visualisations were created on UCINET after inputting the survey data on the advice ties, knowledge mobilisation ties, and informal ties reported by survey participants. The network visuals, which are referred to as socio-grams, were used for descriptive purposes to visualise how actors interacted for the two ties measured: advice ties, and knowledge mobilisation ties. I will begin first by presenting a whole-network visual of the advice tie and knowledge mobilisation tie. Actor icon size refers to their centrality (the number of ties they have where the greater it is, the larger the icon is). The icon colours refer to the organisation that the actor was based in on a full-time basis (Red=MOE; Black=University; Grey=Public schools; Green=External Expert; Blue=Local Authority)

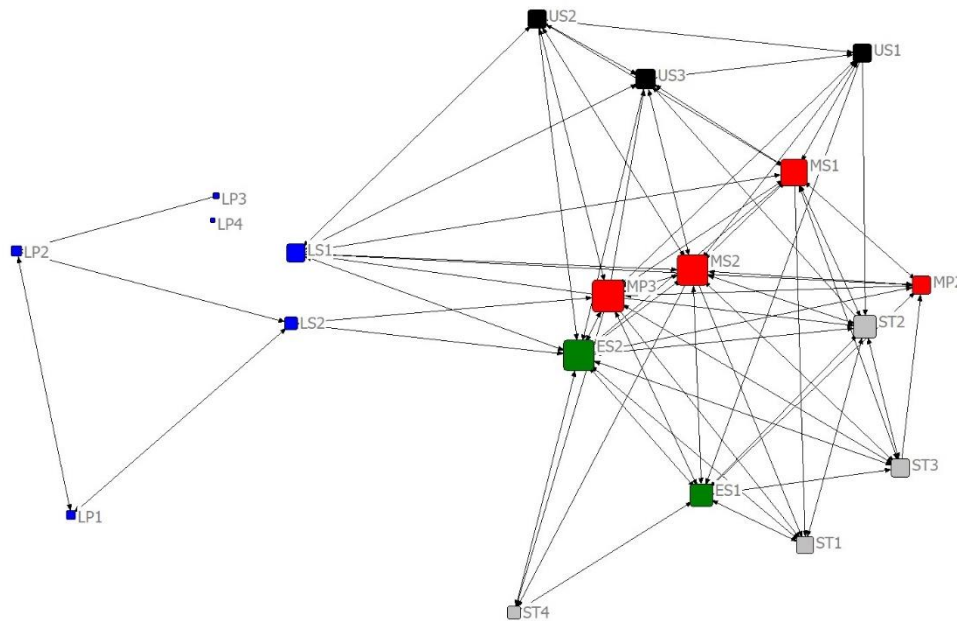


Figure 4.1 Whole network by centrality (Advice tie)

The whole network for both the advice ties and knowledge mobilisation ties shows the most central actors to be within the MOE (MP3, MS3, MS1), in addition

to one external expert (ES2). The external expert worked with MOE on administering the policy community.

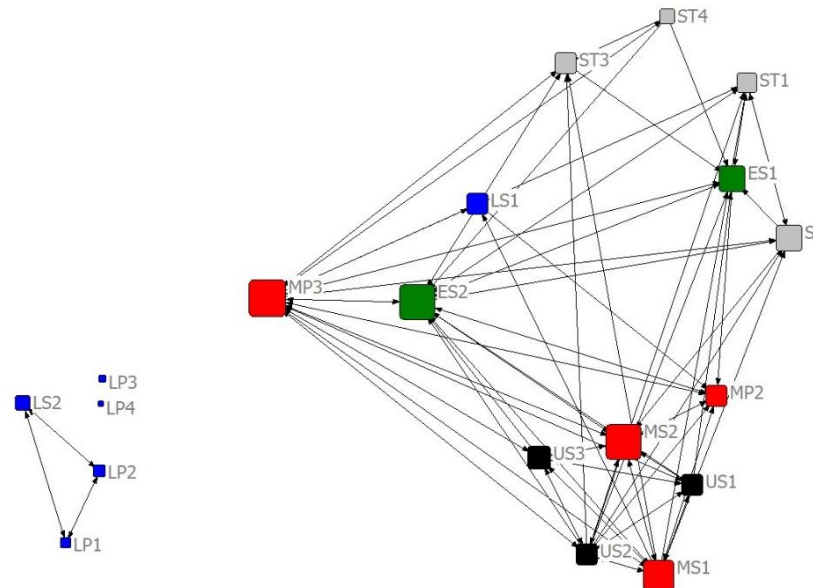


Figure 4.2 Whole network by centrality (knowledge mobilization tie)

The actors within the local authority showed the most isolation from the network compared to the other actor groups. An explanation for this is that only two members from the local authority were involved in the practices of the policy community (LS1 and LS2), but the other local authority actors were not directly involved. All actors from the MOE, public schools, Universities, and external experts, were found to exchange advice and knowledge mobilisation between the groups. There were no isolated actors besides the actors from the local authority. This means that while the structure of policy communities may bring various actors together to work jointly, if specific actors are not directly involved in a joint task or expectation to collaborate, learning and knowledge mobilisation is more likely to be missing. Specifically, as actors involvement in the community is in addition to

their full-time jobs, hence, there may be no motivation to engage in the community if not needed to do so.

4.2.2 Factors motivating interaction

The seven interviews identified three factors that motivated participants to interact within the policy community. These factors were related to: the personal characteristics of actors, seeking and exchanging expertise, and division of tasks. Quotes are used to describe these factors from the perspective of the participants.

4.2.2.1 Personal characteristics of actors

Factors related to the personal characteristics of actors referred to specific features that other community members displayed. For instance, one characteristic that was identified by actors MS1 and US1 as a factor for increasing interaction was communication skills:

“The main factor that motivates me to interact the most in the team is positive communication. Great communicators, demonstrate positive behaviour and ethics, and keenness to improve and perfect the work.” (MS1, 2018)

“One of the main factors that encourages interaction for me personally is how the group can communicate. (US1, 2018)

How open actors were to collaboration and interact was also reported as a factor impacting other actors’ choice to engage with specific community actors, as ST1 recounts:

“I am more likely to interact with actors who are open-minded and can accept collaboration or share similar background experiences.” (ST1, 2018)

Another factor related to personal characteristics that was reported by actors ES2 and MP3, two of the high central actors, was the capacity for learning in community members:

“What makes me consider working with other individuals is their capacity for learning. Actors with capacity for learning are constantly interested in interacting, which as a result, makes me more likely to interact with.” (ES2, 2017)

“The majority of actors I interact frequently with are those who constantly are looking to develop their curriculum and policy skills. They have higher capacities to learn.” (MP3, 2017)

Hence, for a well-functioning PoliLCs, having actors with clear communication skills and capacities for learning will directly impact the nature and frequency of interactions.

4.2.2.2 *Seeking or exchanging expertise*

A further reported factor for increased interaction of participants with other actors in the policy community was the exchange of expertise. That means that an actor would choose to interact with another actor when they sought certain expertise. This can be seen in the accounts of actor US1 and ST1 where they both state that they choose to interact with actors for the expertise they hold that can benefit the policymaking process.

A further aspect of seeking expertise is the sharing of expert knowledge, where more established community members seek to mentor newer members through sharing their knowledge and insight. Both ES2 and MP3 who play a central role in managing the policy community and supporting it:

“I tend to interact mostly with the new joiners to the community that need more support in developing an understanding of curriculum and policy development. I provide constant feedback and guidance through these interactions. There are individuals that join the community with no previous curriculum or policy experience, yet, they come in with keenness to continuously learn.” (ES2, 2017)

“Some actors need more support than others, especially when they are new to policymaking. With these actors, I interact more frequently to allow them to develop the needed skill to support in curriculum policymaking.” (MP3, H, 2017)

The seeking and sharing of expertise is an account of how PoliLCs are capable of acting as a potential mechanism to increase the capacity of learning of actors involved. By experts sharing and interacting their knowledge in a reflexive matter with new comers, the individual capacities and learning skills of the newcomers is likely to be developed.

4.2.2.3 *Division of tasks*

The division of task refers to how leading MOE policy community members divided the tasks for curriculum and policy development between the community members. In doing so, participants argued, collaborative work was encouraged which increased interaction. Interview participants reported that having clarity in tasks allowed for interactions with specific members to take place:

“Knowing what task I am to work on with a group helps increase my interaction with specific members more than others.” (MS1, 2018)

As such, the division of tasks between community members decided how actors would engage with one another. An example where the division of tasks was seen to determine an actor’s interaction pattern. For instance, according to actors US1 and ST1, increase personal interaction depended on the role given to them by the community administrators:

“My involvement and interaction pattern is dependent on my role in the community. For example, I am given the task to identify how actors are grouped by subject. In doing so, I interact with all the community.” (US1, 2018)

“The division and clarity of tasks for me personally is a contributor to my increased interaction with specific members.” (ST1, 2018)

In another account by actors ST2 and LP2, the division of tasks meant that specific actors will be sought more than other depending on the expertise needed to achieve the task:

“If I was given a task on collecting literary texts for the curriculum, I reach out to a subject expert in the community that is knowledgeable in the area of literary texts.” (ST2, 2018)

“I tend to interact the most with those who I am jointly working with on a task, and those who have specific expertise that can benefit me. Also, as director of curriculum, I am in constant interaction with the members involved in Arabic curriculum policy develop to monitor how we are progressing to achieve the goals we have set.” (LP2, 2017)

Yet, the interaction was not limited to members who shared joint activities, as ST2 argues, where seeking expertise was another factor of increased interaction between community members:

“Sometimes we choose to share work and learning conversations with other community members who we are not working on tasks with but have certain expertise. That is useful for diversity of impact.” (ST2, 2018)

This section has highlighted the factors that were found to motivate actors to interact more frequently with other actors in the policy community setting, from the perspective of multiple community actors. The main factors that motivated policy community actors to interact with one another including: the personal characteristics of actors, seeking and exchanging expertise, and division of tasks. In the next section, I present a description of factors reported to limit interactions according to the interviewed participants.

4.2.3 Factors limiting interaction

In this section, participants were asked to identify factors that limited their interaction with other community members. There were three factors that came up in the responses of interview participants to impact interaction which were: lack of clarity in forming joint tasks, limited ability to interact, and not being open to collaborative work.

4.2.3.1 *Unclear joint tasks*

The lack of clarity during task creation was reported by MS1, who commented that when the leaders of the MOE policy community did not provide tasks for the members that required collaboration, less interaction took place.

“When there is a lack of clarity in joint tasks, it is unclear if we are required to collaborate or not. In these cases, actors are more likely to not interact with one another.” (MS1, 2018)

When tasks are not divided to encourage interaction, the role of specific actors in the community is deemed less active. For instance, if a task does not require collaboration, actors are less likely to collaborate as argued by LP2.

While task division is a deterrent of interaction according to interview participants, a critical factor impacting the division is the type of expertise that an actor was invited to the policy community due to. For instance, actor US1 reports interaction in the community to be limited as his participation in joint task is for his specific expertise in Arabic language. Hence, only interacts in tasks that need review on the collected curriculum content. Similarly, an account by ST2 who is involved for her teaching experience reported limited interaction due to being involved for her teaching expertise as seen in the following quote:

“The teachers within the community are given less tasks to work on compared to the MOE employees. This may impact the interactions.” (ST2, 2018)

Joint tasks are found to enhance the types and frequencies of interaction by community members. As such, policy communities can benefit from involving specific joint tasks that will result in members more likely to interact with one another.

4.2.3.2 *Limited opportunities to interact*

Limited interaction opportunities were most often linked to geographical distance between actors, time, and pre-existing commitments. All members of the

policy community that were not working within the MOE were full-time employees at other organisations. Hence, there was a difficulty in identifying time and place to meet. According to actor MP3:

“It is hard for most members to find time to interact face-to-face. Most of the members are full-time employees with full-time responsibilities.” (MP3, H, 2017)

In an account by actor US1, the challenge of time was argued to be as result of community members not given time off their work to support the policy community further. Besides having other full-time jobs, the MOE was based in Dubai, and the members of the community had to come from across the UAE needing to travel for 1-2 hours to Dubai. This created a situation of geographical distance between community members. An account of this, challenge was discussed by actor ST2:

“The geographical distance of community members where meetings happen at MOE in Dubai, and most members come from geographical areas that are an hour apart.” (ST2, 2018)

For policy communities to be facilitated as structure for interaction and learning, time is an essential resource that organisations interested in learning needs to commit. In particular, time for deep learning to take place, and learning interactions that allows community members to come up with solutions collaboratively.

4.2.3.3 Lack of openness to collaborate

In addition to the factors above, actor US1 identified a lack of openness to collaborate within specific actors as a limiting factor. Only actor US1 discussed this particular factor as a hindrance to interaction. Actor US1 referenced a situation where actors involved in the community were not interested in keeping an open mind, which limited interactions for learning and with other community members.

This section focused on describing the interaction patterns of the community, factors that motivate, and factors that limit these interactions. The findings from this section parallels my theoretical framework of PoliLCs where I built an assumption that PoliLCs are purposefully initiated to encourage interaction between policy and non-policy actors. In addition, that these interactions require support of interaction structure (seen through the formation of the community); and integration within the policy processes (through joint tasks as a process of the community); and capacities for learning (seen through capacity as a motivator for interaction). Hence, the findings on interaction at this point aligns with my theoretical framework of PoliLCs. In the next section, I focus on describing the learning process that takes place through these interactions, which is the second part of my theoretical framework.

4.3 Description of Learning

A critical element in developing the conceptualisation of PoliLCS is to understand and describe learning in the Arabic language policy community. In this section, I describe from the interviews accounts of individual and group learning, the learning resources available, and what motivated actors to seek learning. These themes are formed according to answering how and why actors in the community were learning. The how question is answered in the section 4.3.1 and 4.3.2. Wherein the why question is answered by section 4.3.3 on what motivates actors to seek learning.

4.3.1 Individual and group learning

The Arabic language policy community includes learning processes at different stages of the curriculum and policy development stages. In section 4.1 I

set out the process of joint actions that community members are engaged with. There were different types of learning that took place within the process of joint action which were recognised by the policy community actors in the conducted interviews in four phases: agreeing on common goal and tasks, collecting and evaluating new curriculum content, creating lesson plans, and piloting them. In each of these phases, learning manifested within the policy community. I will use participants' accounts to analyse how learning unfolds in each of these phases.

The first phase of agreeing on common goal and tasks required that all community members involved had the knowledge to take part in curriculum and policy development. As such, curriculum and policy expert members used the opportunity of a three-day face-to-face interaction session to exchange their learning and allow new joiners to gain an understanding of policy and curriculum development. According to actor MP3, when actors with varying policy and teaching experience come together, learning is at its highest as the community facilitate expertise sharing.

The phenomenon of learning exchanges that MP3 described were found in the accounts of new joining members ST2 and ST1:

“New community joiners with no background in curriculum or policy would attend small group lessons with subject experts and policymakers where we were given policy lessons over three hours each in three days.” (ST2, 2018)

“The policy experts in the group gave us hands on experience with supervision from the subject experts who gave us on-going feedback. This process of collaborative learning and knowledge mobilisation was very effective to my learning, particularly, as I had no experience before of curriculum policy development.” (ST1, 2018)

In the second phase, actors collected curriculum content and came together to evaluate their choices, and make a decision. In this phase, learning

interactions took place between policymakers, teachers, and subject experts within a group setting. In this phase, subject experts along with policymaker played a critical role in providing constant opportunities for learning. As US1 put it

“In the review phase of the selecting curriculum content, I provide on-going feedback. We believe that continuous learning is important for the development of curriculum policy.” (US1, 2018)

In addition, as actors came together to make choices on curriculum content, they did so in an agreed upon evaluation framework. According to MP3, an internal evaluation framework for this process was developed by the community to facilitate greater learning, and information exchange. Actor ST2 commented on the whole learning process in the different phases of curriculum and policy development that the community was engaged with. The focus of ST2’s account was the continuous learning opportunities provided, and the approaches of the MOE to sustaining continuous learning through their practices:

“There are also continuous learning opportunities. When the policymakers involved make a decision regarding what is selected as curriculum content or instructional decision; they would always come back to us if it involved a part we did and explain what they chose and why did they chose it.” (ST2, 2018)

This was also seen in an account by ST2 as an illustration of MOE policymakers’ support for learning:

“The policymakers wanted us to learn, this was clear as they constantly maintained a collaborative learning environment as the community was working, and constant knowledge sharing was encouraged and done.” (ST2, 2018)

The last phase of selecting instructional plans and piloting them was not only a learning opportunity, but also a method to collect knowledge on how the proposed curriculum content choices addressed the goal intended for it, which was to improve the curriculum. In addition to pilot evaluation, focus groups were also conducted in schools to collect additional learning on how the curriculum choices

were achieving their goals. As such, the curriculum policy community was recognised by the interviewed participants as a space for constant learning opportunities. Learning in this context was seen as a method to improve curriculum.

The identification of practices that include individual and group learning in this section aligns to the theorisation of PoliLCs towards policy learning. Specifically, my theoretical framework identifies the concept of social learning at the centre of the assumed practice of PoliLCs. As such, the accounts on individual and group learning are practices that can be seen a direct outcome to social learning. Hence, learning within PoliLCs while exchanged in a social setting, is an outcome of individual and group learning processes.

4.3.2 Learning resources available to community members

The interview participants reported multiple learning resources available to them to support learning on curriculum and policy development. I will begin with the broader aspect of resources available first, which was benchmarking from international research. According to actor MP3, curriculum documents from other countries were explored in the area of language sciences. A similar account was expressed by LP2, where benchmark strategies were used to aid learning and decision-making in the policy community.

The second learning resource that participants in the survey highlighted was access to resources books, published research, and a digital library. Actor MP3 highlighted a practice that the MOE engaged with, where printed and digital resources were shared and discussed amongst the community members. As mentioned in the previous section, information from curriculum pilots and evaluations were also regarded as a learning source available to the community

members. Both actors US1 and ST2 report the use of learnings from previous curriculum pilots in informing their current practices.

The resources reported to be used in the explored community of benchmarking, international research, and pilots fall under the definition of evidence that this thesis uses. To draw on this finding, multiple sources are found to be used in the community, which supports practices to achieve evidence-informed policymaking as the theoretical framework of this study argues.

4.3.3 Factors motivating engagement with learning

In this section, interview participants' accounts of why they chose to engage with learning within their policy community indicated that they did so when facing uncertainty, and when engaging with other actors who sought learning. In an account by MS1, the learning process is normally sought in situations that require collaboration and knowledge sharing to identify and select evidence when complex questions arise.

Hence, actors described that learning became a tool to address complexity. This situation was also illustrated by both US1 and ES2 who explained engaging with learning to answer specific questions that arise related to policy or practice. Another contributor that motivated actors to engage with learning, in particular collaborative learning, was the capacity for learning present in other actors. This was identified in the accounts of multiple interviewed participants. Actors who showed higher capacities and interests to learn and share learning often encouraged and increased interaction with learning. These individuals as quoted by ES2 "do not stop learning nor seeking learning and engaging with research".

The assumption I build early in the literature review as to why PoliLCs may be formed was based on the notion of policymakers developing networks for

learning when faced by uncertainty in policymaking. The interviewed policy community actors reported uncertainty and seeking specific learning as motivators to for policy actors will to engage with learning. As such, it is more likely that in areas of public policy where policy actors are confronted by uncertainty and challenges that needs specific sets of learning; structure and processes that permit interaction and learning is sought. Hence, the PoliLCs framework can describe these instances of seeking learning, as well as help identify how learning can be supported further. The next section focuses on describing evidence and research use in the practices of the policy community. The goal of doing so is to realise what role, if any, does evidence and research play in the practices of the policy community. As a model that attempts to enhance evidence use in decision making, it is important to explore evidence and research use in the policy community explored if the model of PoliLCs has potential in supporting EIP as argued.

4.4 Description of Evidence and Research Utilisation

The description of evidence and research utilisation referred to the practices that the interviewed participants described where evidence was used in the decision-making process. Participants were asked three questions. First, what is the role - if any - of evidence in their decision-making process? Second, what factors motivate evidence and research use in the policy community? And lastly, what barriers exist that limit evidence utilisation?

4.4.1 Role of evidence in decision-making process

Participants describe evidence use in the policy community in different stages of the policy and curriculum development process. In the goal and task

setting phase that took place over the three-day introductory meetings at the MOE, actor ST2 reported the following uses of evidence:

“In the introductory meetings, the experts leading the community MP3, ES2, and MS1 share with us research and their knowledge of forming policy and curriculum. Senior experts made sure that they share latest international research on language science, curriculum and policy development and implementation.” (ST2, M, 2018)

Subject-relevant expertise was also shared in this stage of curriculum policy development, which dealt more specifically with the Arabic language. This can be seen in an account by MS1:

“Evidence from research is used within the learning community and exchanged in group meetings that takes place after tasks are divided to community members.” (MS1, H, 2018)

MS1 added that evidence utilisation also put to use previous and current instructional plan evaluations that the community members had collected when piloting the new curriculum content, and the previous curriculum evaluations conducted internally that included results from teacher survey’s and class observations. In addition to the internally conducted evaluation, the subject experts within the community provided the group they were involved with research and books to inform decision-making.

As such, evidence was described by the interviewed participants to play a role in various stages of the policy community’s learning and decision-making process. In the next section, I discuss further the factors that motivated evidence use, and what barriers existed to the use of evidence and research in the policy process.

4.4.2 Factors motivating evidence and research utilisation

Interview participants highlight two factors motivating the use of evidence and research in the practices of the policy community. First, it was used to inform better choices for curriculum policy development; and second, to enhance teaching

practices. According to MS1, research and evidence is used to ensure that proposed policies align with the vision and strategy of MOE. Moreover, both MP3 and US1 report the importance of research in determining the effectiveness of proposed policies and curriculum outcomes.

Thus, evidence and research was seen by the interview participants as a method or tool to enhance policy outcomes and choices as reported by four of the seven interviewed actors. In another perspective, from a teaching point of view, ST1 and ST2 reported that their interest in evidence and research was to support improving curriculum and pedagogy. Mainly, the research on language sciences that is transferrable to the Arabic language curriculum development.

According to the participant interviews, two out of the seven interviewed actors chose to engage with evidence for improvement, whether that be to improve the policy development process, or personal practices and pedagogy. While an interest in engaging in evidence is explained in the quotes above, many barriers still remain a challenge to evidence use in the policy community. In the next section, I discuss the barriers to the realisation of evidence-informed practices by identifying individual, organisational, and research-related factors contributing to the challenge.

4.4.3 Barriers to evidence utilisation

In this section, I present findings from the participants' interviews of their accounts about barriers that were found to limit the utilisation of evidence more centrally in the policymaking process. The section will be divided into three sub-headings grouping the findings under barriers related to: evidence and research, the individual, and the organisation.

4.4.3.1 Barriers related to evidence and research

The barriers related to evidence were those that referred to challenges of availability, practicality, and quality. The availability of evidence and research related to the Arabic language curriculum was scarce, according to actors ES2 and LP2. More scientific research for Arabic language are in desperate need states actors ES2. The availability of literature on Arabic language pedagogy remains scarce, causing a challenge to current curriculum and policy developers.

Interview participants described two situations that took place when confronted with the lack of available research to support evidence-informed policymaking. Policymakers at the Ministry level and local authority level described the attempt to compliment the lack of research in Arabic language with using international research as a benchmark. Hence, international research in the area of language teaching is used to develop transferrable findings when possible. An example of these attempts of transferability reports actor MP3 is using the U.S common core framework to compare language progression of Arabic versus English.

While benchmark and international research was described as an information point for curriculum policy development, US1 reported the challenge of context-relevancy:

“Benchmarking research is also useful, however, it’s rarely relevant to the context.” (US1, 2018)

Actors ST1 and ES2 described accounts where there were personal attempts of subject experts in the community to conduct primary research on curriculum policy to address the lack of research available. While these attempts are on a small scale, their findings were reported useful to community members.

Another reported barrier to evidence and research use was the lack of practicality of what is available. Actor ES2 explains that research on Arabic language is very theoretical and lacks practicality, and in most cases, it lacks the main aspects of scientific research. This challenge was similarly reported by actors ST1, ST2, US1, LP2 hence is a common theme.

The third and last barrier reported to evidence and research by the interview participants was the quality of existing research. When actors identify research to use, a question of quality remains present. As actors US1 and ST1 accounts.

“As for Arabic language researchers, the question is if its available, what is the quality, and is it relevant.” (US1, H, 2018)

The lack of a research culture in the UAE and Arab region means that research on the topic of Arabic language curriculum is scarce to begin with. The scarcity is sometimes supplemented with online resources that are self-published by individual Arabic language teachers or researchers, which may be not necessarily of quality.

“When we personally seek evidence and research on Arabic language curriculum, I rarely find useable resources, and when a resource is found, I do not trust its quality.” (ST2, 2018)

The barriers to research were expected to be identified, given the context of the UAE in which I discussed in the introduction chapter to lack a research culture. As such, the findings from my interviews is a continued confirmation that research remains being challenges by issues of context, quality, and access. While the PoliLCs context may support opportunities for research to be disseminated and used, research needs additional support to be of use to policy actors.

4.4.3.2 Barriers related to individual factors

There was one barrier related to the individual factor of the capacity for learning and understanding research of participants in the community, which

impacted, or limited evidence use. Actor ES2 described an individual process of engaging in seeking evidence and learning to share with other community members. In ES2's account, one can see the presence of self-initiative or motivation with capacity to understand research. Wherein, actors who seek research to answer their questions will do so based on interest and ability to understand and utilise research.

In another perspective by actor ST2, the role of limited capacity for and knowledge of conducting and using research was highlighted. Actor ST2 reports that there is a shortage of specialised knowledge in research and evidence between teachers, which acts as a barrier to evidence use. This can be supported with specialised teacher training in research use as ST2 suggests.

ES2 and ST2's comments highlight that that for evidence to be utilised, capacity for learning and understanding evidence and research was beneficial. The capacity for learning was aided by specific skills such as knowledge and understanding of research, or skills to engage in the production of research. Capacity for learning plays an integral role in the PoliLCs theoretical framework. In particular, as a supporting variable to achieve effective PoliLCs. The findings showed in both interaction, learning, and now research utilisation that capacity for learning is a contributing factor.

4.4.3.3 Barriers related to organisational factors

Three areas related to the organisational practices of the MOE policy community are described by the interview participants to be a barrier to evidence use. These were barriers related to the time of participants involved, the alignment of practice with evidence use, and organisational support to evidence identification, development, and utilisation.

Earlier in this chapter, under factors that impact individual engagement in learning and interaction, I argued that time plays a large role in supporting interaction and learning. Mainly, that time was needed for community members to identify, share, and use evidence to develop curriculum and policy. The accounts of interview participants showed a scenario where none of the subject and teaching experts in the community were full-time employees as Arabic language curriculum or policy developers. It is argued by US1 and ST2 that the community should include full time teaching experts who have taught the Arabic subject previously. US1 added that based on his experience in working within the curriculum department in the UAE and Jordan, the full-time team of various expertise was essential for the consistency of outcomes.

One aspect that could support evidence utilisation was to attach the practice of policymaking with evidence use. This was described by ES2, wherein when the policymaking process makes the use of evidence and learning an integral practice that has to take place; it is more likely for evidence to play a wider role. Also, if that was the case, the policymaking organisation would put mechanism in place to support achieving the practice of evidence use.

The third organisational barrier to evidence utilisation is organisational support. That included a lack of financial and resource support for educational research as actors ST2, MS1, and US1 explain. The actors report that MOE does not have a designated budget that supports curriculum research. In addition, there remains a gap in identifying an official database for educational data and research within the country to act as a data repository for educational research.

This section on organisational factors reported as impacting evidence use highlighted time to engage in evidence utilisation, and organisational support for

evidence as main barriers. Interview participants described the lack of financial support for evidence and research initiation within the MOE as an obstacle to evidence use, in addition to the lack of full-time available experts working within the policy community.

Based on the accounts and descriptions of the seven interviewed participants within the Arabic language curriculum policy community. I began by describing the community first through the interviews. I followed with a description of interaction, learning, and evidence utilisation. I followed with a description of interaction, learning, and evidence utilisation. The chapter sub-sections were arranged to align with the research questions which will be discussed in the next chapter.

The goal of the discussion section, next, is to answer the research questions, and to reflect on what the findings mean in relation to the theories discussed in the literature review. I adopt the model of theoretical generalisation, where I realise that the findings from this chapter is social-constructs unique to the context and are not generalizable. As such, I will only associate the findings of this thesis with general theories to build understanding of the theoretical and empirical aspect of PoliLCs. The discussion chapter will be arranged with the research questions as main headings.

5 Discussion

The purpose of this chapter is to interpret the study's findings in light of what is already known on PoliLCs. In doing so, I will also explain any new understandings or insights, and unexpected findings. The following sections are presented in the same order as the findings chapter which followed the research questions. I will begin by discussing how learnings from the Arabic language curriculum policy community provide insights to the characteristics of PoliLCs. Then why actors in the policy community interact, learn, and utilise evidence and research is explored. The chapter concludes by discussing the lesson learned from investigating the concept of PoliLCs to further evidence-based policymaking in the UAE.

5.1 Emerging Patterns in Policy Learning Communities

The main research question was to identify and understand the practices of an Arabic language curriculum policy community in the UAE as an exploration of the concept of PoliLCs. To that extent, this section focuses on discussing the findings on the characteristics of the policy community explored in light of the assumptions I built in chapter two. At this point, I do not refer to my explored policy community as a policy 'learning' community. Before determining the extent to which the sample learning community can be referred to as a PoliLCs, I will examine the findings on characteristics of the community explored against: 1) Stoll's (2008) PoliLCs sample; 2) the five-dimensions of effective collaborative models I developed in chapter 2; and 3) the PoliLCs definition that I arrived at in chapter two. I will then reflect what my findings mean in comparison to the existing theory.

5.1.1 Aligning PoliLCs characteristics to findings

There are five key categories based on my synthesis of Stoll's (2008) description of three PoliLCs I use to summarise and discuss the characteristics of the Arabic language policy community explored. These categories are context, participants, purpose, interaction, and learning activities. For each of the categories, I use a table to compare how the findings of this thesis compare to Stoll's (2008) findings. A table is used to analyse and compare the findings on PoliLCs characteristics to provide the reader with the information in a direct and simple manner.

5.1.1.1 Context

Findings from the Arabic language curriculum policy community	Findings from Stoll (2008) three cases of PoliLCs
<ul style="list-style-type: none">- Situated at the federal level of policymaking- Community formed by the Ministry of Education- Formed around the context of Arabic language curriculum policy	<ul style="list-style-type: none">- Two cases situated at a local level of policymaking- One case at the international level

Table 5.1 Comparing context findings with Stoll (2008)

The context of the policy community is situated at the country-level of policymaking, in the area of curriculum policy specifically. Stoll's (2008) cases described PoliLCs at the local and international level (see Table 5.1). From a context point of view in exploring a phenomenon in the framework of PoliLCs, this study offers descriptions from a new context. This is useful because to explore the concept of PoliLCs, different contexts are able to offer insights that add to the existing knowledge base. In addition, the exploration in this study of a new context means that the concept of policy communities can be studied across different

domains, including various educational domains such as curriculum development, teachers and school leadership.

The context of the policy community is determined by who is involved. For instance, in Stoll's (2008) international PoliLCs, the sample of participants came from 19 countries. For this study's, participants crossed from country-level to local-level policymakers, subject experts and practitioners.

5.1.1.2 *Participation*

Findings from the Arabic language curriculum policy community	Findings from Stoll (2008) three cases of PoliLCs
<ul style="list-style-type: none"> - Country level and local policymakers - Policy experts (MOE and local authority) - Subject experts (MOE and external) - Academics (UAEU) - Teaching experts (Public schools) 	<ul style="list-style-type: none"> - Case 1: local policymakers, research and policy experts, international experts, politicians, and practitioners. - Case 2: Policymakers from 19 countries, civil servants, education and policy experts - Case 3: International experts, ministry leaders, district inspectors, staff of teacher training institutes, executives from national and provincial education authorities

Table 5.2 Comparing participants findings with Stoll (2008)

The policy community, in terms of participant's diversity shares similar findings to Stoll (2008). Mainly, the common factor is that participants include policymakers, civil servants, practitioners, academics, research experts, and policy experts. In comparison to Carlsson (2000) policy network typologies where epistemic communities and policy communities are close models to PoliLCs in terms of participation (see Table 5.2), both my findings and Stoll's expand on who is involved. Carlsson's description of participants in epistemic and policy communities limits participation to government actors, policymakers, and subject experts; while Stoll's study and this study expand participants to practitioners, researchers, academics, and various experts. One possible interpretation for

including these additional participants is that when ‘learning’ is sought as a central purpose of a policy community, the need to expand participation parallels the types of learning sought. Consequently, a community can add more participants on top of what the usual policy network literature ascribes as being necessary.

5.1.1.3 Purpose

The purpose of the policy community in my study was described by the interview participants as essentially to develop curriculum policy for one subject area, and collaborate on editing the curriculum content continuously. From my analysis of PoliLCs, the alternative collaborative learning models and the policy network typologies explored; the purpose of these models was to either inform or support policy and/or decision-making. On the contrary, in this study’s explored community, the purpose of the community was beyond offering support or information to inform curriculum policymaking as reported in section 4.1. The policy community studied was expected to develop the Arabic curriculum policy and standards, and provide continuous edits to the curriculum content.

Findings from the Arabic language curriculum policy community	Findings from Stoll (2008) three cases of PoliLCs
<ul style="list-style-type: none"> - Develop policy and standards for the Arabic language curriculum - Continuously edit and improve the curriculum 	<ul style="list-style-type: none"> - Case 1: Support strategy design - Case 2: Support policy development - Case 3: Professional development school heads

Table 5.3 Comparing purpose findings with Stoll (2008)

5.1.1.4 Interaction

In this thesis, the policy community model was deliberately used by the MOE to develop policy through bringing in various participants from outside the organisation to inform and develop these decisions. In doing so, the policy community can be seen to play a formal role within the MOE, not just limited to supporting or informing decision-making.

Findings from the Arabic language curriculum policy community	Findings from Stoll (2008) three cases of PoliLCs
<ul style="list-style-type: none"> - Three-day workshop - Once a month meeting over six months every year - Email exchanges (on-going) - Phone calls (on-going) - Phone chat group (on-going) 	<ul style="list-style-type: none"> - Case 1: Twice a year over four years - Case 2: Three conferences and three workshops over one-year period - Case 3: Four forums over one-year period

Table 5.4 Comparing interaction findings with Stoll (2008)

The interaction frequency found within the explored policy community exceeds what is identified in Stoll's (2008) cases of PoliLCs. According to the interviewees, the frequency of interaction was guided by joint work that community members were assigned (see section 5.2.1). As the policy community sample in this study was working together on developing policy, the interaction was an outcome of the MOE's expectation and task divisions. On the contrary, in Stoll's PoliLCs cases, there was no expectation that the community actors had to develop jointly a policy or programme. According to the literature, frequency of interaction suggests successful utilisation of learning (Huberman, 1990; Dentler, 1984; Peterson and Emrick, 1983). In Table 5.5 below, the learning activities from my sample is summarised along with Stoll's (2008) PoliLCs learning activities.

5.1.1.5 Learning activities

Findings from the Arabic language curriculum policy community	Findings from Stoll (2008) three cases of PoliLCs
<ul style="list-style-type: none"> - Transfer of learning from experts on curriculum and policy development techniques and methods - Sharing of research and learning on Arabic language, curriculum, and policy development. - On-going dialogue and feedback with experts - Exposure to benchmark and international research on policy and language - Evaluation of curriculum policy - Access to resource books and e-library 	<ul style="list-style-type: none"> - Case 1: Use formative evaluation to support strategy design. Other forms of learning included expert suggestions, dialogue and inquiry, mutual problem solving, and feedback. - Case 2: Support policy development through in-depth analysis. Learning included synthesising research, identifying successful policy practice, identify policy options, sharing from experience, and dialogue from expert. - Case 3: Prepare school heads through sharing of research and practices. Learning included sharing of pedagogical techniques, and sharing of research and learning on school development and personal capacity.

Table 5.5 Comparing learning activities findings with Stoll (2008)

In Stoll's PoliLCs examples, the four themes identified for learning activities are: learning about the context, learning from research, a dialogue and feedback practice, and identifying options to implement. The four themes were also present in the findings of this study (see Table 5.5). In addition to the four themes, the community in this research also showed learning activities that included learning from experts, and learning policy development. Intentional learning activities were set up by MOE for the policy community, where the MOE ensured learning for participants to develop the necessary skills needed in developing policy and curriculum.

To summarize, Stoll's PoliLCs examples provided a foundation for this study, whose research findings add to existing knowledge about PoliLCs. The main difference that this study's case offers is a model of a highly interactive community.

In addition, this study shows evidence of a policy community that is involved in making policy and informing decisions, which is beyond what the literature currently accounts of policy community's practices. To identify if this study's case represents a PoliLC, I apply first the definition of PoliLCs and compare it to findings. I then evaluate if what the interviewees' descriptions of their policy community are theoretically aligned to the definition of PoliLCs.

5.1.2 Applying PoliLCs definition to findings

To begin applying the definition of PoliLCs arrived at in the chapter two, I address each of the variables in the definition. The definition of PoliLCs put forward in the literature review involved four components:

- 1) Purposeful grouping of actors, 2) within policymaking, 3) who are linked by a shared policy problem or interest, 4) in a critical, ongoing, reflective, collaborative, growth-promoting, inclusive, and learning-oriented practice.

5.1.2.1 Purposeful grouping

The interview findings identify that the policy community explored was purposefully established and curated by the MOE. Actors MP1 and MP3 mentioned that the policy community was "brought together by MOE" and that the "MOE decides and selects" who takes part in the policy community. This finding is aligned with Stoll's (2008) description of three PoliLCs, where each was purposefully set up by an entity and not a natural occurrence. I argued previously in chapter two that PoliLCs cannot be formed as natural occurrences of the kinds of self-organization that other collaborative learning models may be an outcome of. In addition, I argued that the policymaking setting needs to provide access for external actors to be involved. In the sample of this study, the MOE provided access to external participants through the policy community. Thus, the first variable of purposeful grouping of actors is reflected in this study's findings.

The implication of the finding on access in both my study and Stoll's suggests that collaborative structures in the policy setting require intentional efforts to bring actors together. This implication can be transferable into other decision-making settings such as in business organizations and beyond public policy. An example is when an entity purposefully sets up a policy/decision-making community to engage with actors from beyond the organization for learning purposes to inform their choices. Evidence of these structures allowing an open system where participants beyond the organization can join can be seen in the literature on policy networks and epistemic communities too (Carlsson, 2000; Sandström and Carlsson, 2008).

5.1.2.2 Within policymaking

This study's case is based in an education policymaking setting, specifically dealing with curriculum policy. Curriculum policy referred to decisions regarding the standards and content of the Arabic language subject in primary and secondary education. In this study, the curriculum policy for Arabic language is a policy to address the production and delivery of the Arabic language subject. Hence, this study's case satisfies the second variable in the definition of PoliLCs as existing within a policymaking setting.

5.1.2.3 Linked by shared policy problem or interest

The findings of this thesis demonstrate a shared interest for "improving and enhancing the curriculum" (see section 4.4.2). The sample actors worked together on addressing the shared interest through critical, ongoing, reflective, collaborative, growth-promoting, and learning-oriented practice.

Critical, ongoing, and reflective practices are seen in the accounts of the interviewees through the description of the learning activities that took place in the policy community. Evidence of these practices can be seen in section 4.1.3 that

discusses individual and group learning. Multiple interviewees reported that in the policy community they were engaged in “continuous dialogue” and “constant feedback” which happened throughout the joint work that took place. The policy community was also found to feature growth-promoting practices, in particular, between subject experts and policy experts who exchanged learning with new joiners to develop their curriculum and policy development skills.

As such, the accounts of the policy community participants can be seen to align with both growth promoting and learning-oriented variables in the PoliLCs definition. The purpose of this section was to use the findings to identify if the policy community explored in this study aligns with the definition of PoliLCs. The section demonstrated how each of the variables in the PoliLCs was found in the accounts of the participants in the Arabic language curriculum policy community. As such, the sample I investigated in this study can be considered a PoliLCs. Further, after identifying the sample as a PoliLCs, I will discuss next if it achieves the five dimensions that makes it an effective learning model.

5.1.3 Applying the five dimensions of effective collaborative learning models to the findings

The five dimensions of effective collaborative learning is a framework I synthesised from exploring alternative models to PoliLCs. In my exploration of models, I have identified the shared features found to be associated with effective collaborative learning models. The five dimensions are useful in exploring different variables that may enhance learning in collaborative structures such as those found in PoliLCs. In chapter two, I put forward assumptions on how each dimension should appear within a PoliLCs for learning to be effective. I compare my assumptions with the research findings next:

Dimension	Assumption on dimension application to PoliLCs	Evidence from findings in chapter four	Section with evidence
Individual and group learning	Policymakers interacting for learning with curriculum experts, Arabic language specialist, Arabic language researchers, Arabic language teachers	<ul style="list-style-type: none"> • Policymakers with subject experts and teachers interacted with one another • Individual and group learning was described by interview participants 	<ul style="list-style-type: none"> • Demographics section 4.1.1 and interaction maps section 4.2.1 • Section 4.3.1 p. on individual and group learning
Joint enterprise	Improving the policies related to the Arabic language curriculum for primary to secondary school students through collaborative learning practices	<ul style="list-style-type: none"> • Joint purpose of improving curriculum policy was described by participants 	<ul style="list-style-type: none"> • Section 4.1.2 on purpose and joint action
Interaction	<p>Interaction is on-going</p> <p>Interaction is motivated by trust and shared beliefs</p> <p>Knowledge and research on pedagogy, curriculum, and assessment is mobilised</p>	<ul style="list-style-type: none"> • Interaction is on-going • Have not been identified <p>Instead, motivation to interaction were identified as personal characteristics of actors, division of tasks, seeking and exchanging expertise</p> <ul style="list-style-type: none"> • Knowledge and research on pedagogy, curriculum, and assessment is mobilised 	<ul style="list-style-type: none"> • Section 4.1.3 on modes of interaction • No evidence • Section 4.2.2. on factors motivating interaction • Section 4.3.1. on individual and group learning • Section 4.3.2 on learning resources available to community members • Section 4.4.1. on role of evidence in decision-making
Focus on development	Focus on improving policies that impact the Arabic language 1-12 curriculum	<ul style="list-style-type: none"> • Focus on improving the Arabic language curriculum 	<ul style="list-style-type: none"> • Section 4.1.2 on purpose and joint action

Table 5.6 Five dimensions of effective collaborative learning

Dimension	Assumption on dimension application to PoliLCs	Evidence from findings in chapter four	Section with evidence
Support system:	<p>Organisational:</p> <p>Organisation/leadership are committed for learning</p> <ul style="list-style-type: none"> • Interaction structures exist (e.g. teams, communities, processes) • Organisation/leadership facilitates opportunities for interaction (e.g. time, meetings, virtual discussions) <p>Individual:</p> <ul style="list-style-type: none"> • Participants have and/or develop capacity for learning • Group dynamics are positive and trust relations develop • Individual mental models allows for engagement with learning 	<ul style="list-style-type: none"> • Specific subject and policy experts were committed to provide learning • Interaction structure exists through the Arabic language curriculum policy community • Organisation/leadership facilitates opportunities for interaction (e.g. time, meetings, virtual discussions) • Participants have and/or develop capacity for learning • Have not been identified • Have not been identified 	<ul style="list-style-type: none"> • Section 4.3.3 on factors motivating engagement with learning • Section 4.1.3 on modes of interaction • Section 4.1.3 on modes of interaction • Section 4.1.3 on factors motivating interaction • No evidence • No evidence

Table 5.7 Application of five dimensions to findings (continued)

The findings in Table 5.6 and 5.7 show that the five dimensions for effective learning models were identified in my research. This means that the five dimensions and their assumptions, which were built on the literature of other

collaborative learning models, can be transferred to the exploration of the PoliLCs model. In addition, the findings and alignment with the five dimensions is an example of critical factors that need to be considered if organizations are attempting to support expanding learning beyond their borders.

However, there were three variables related to interaction and engagement with learning in which my findings neither confirmed nor rejected. These were the following:

- Interaction is motivated by trust and shared beliefs
- Group dynamics are positive and trust relations develop
- Individual mental modes allow engagement with learning.

A possible interpretation for not identifying findings on these factors or variables may be the result of the interview questions asked. To avoid forming bias in responses, I kept the research questions open ended without suggesting answers. For instance, participants were asked: what motivates you to interact with other actors? And what motivates you to engage with learning? Perhaps the assumptions on trust, shared belief, group dynamics, and mental modes were a factor for interaction and engagement, but the responses from the questions did not identify nor query them. From these variables, it was surprising that trust was not brought up as a factor that impacts interaction, specifically, as the literature on interaction highlighted the factor of trust in many different studies of learning communities (e.g. Bryk et al. 1999; Bolam et al. 2005). However, had trust been a variable central to my theoretical framework, it would have been necessary to add interview questions that attempted to understand the role of trust in interaction.

This section started with an aim of understanding what can be learned empirically from the Arabic language policy community in the UAE, to further the understanding of the PoliLCs concepts and its characteristics. To do so, the

section adopted a strategy of applying three key learnings from the literature to the findings of this thesis. As such, this section used the following learning as a process of analysing how the findings compared, contrasted, or added to what is known.

- What was known in the literature about the characteristics of PoliLCs from Stoll (2008)
- The definition of PoliLCs that concurs with Stoll (2008) work
- The five dimensions of effective collaborative learning generated from the analysis of the literature on PLCs, policy networks, organizational learning, and communities of practice.

The first application to the findings was related to comparing what was known of the characteristics of PoliLCs from Stoll's (2008) three cases. The key findings at this point is that the context explored in this study shared similar features to Stoll's interpretation of being in a policymaking context, including a range of participants, and engaging in learning activities. The main difference, however, is the frequency of interaction found in the context explored and the operational role that the Arabic language policy community had in the creation of policy. I then went on to apply the definition of PoliLCs, which was arrived at in the literature review, to the findings of this thesis. The goal was to identify if the sample of the study meets the definition of a PoliLCs. Each variable in the definition was then discussed using evidence from the findings. The community explored according to the description of the interviewees was found to align with the definition of PoliLCs.

I then concluded the section by exploring the relevance of the five dimensions of effective collaborative learning models to my research findings. The assumptions I had put forward in the literature review on the five dimensions were compared to my research findings. The majority of the assumptions put forward were identified and explained in the findings. The assumptions that were not

identified in the findings were related to the role of trust, shared beliefs, group dynamics, and mental modes in motivating interaction. In the next section, I attempt to answer the question on how and why actors in the Arabic language curriculum policy community in the UAE interact and learn..

5.2 Interaction and learning in policy communities

The purpose of this section is to answer the question on how and why actors in the Arabic language curriculum policy community in the UAE interact and learn. The findings will be compared to what is known in the literature, and indicate what the thesis findings mean.

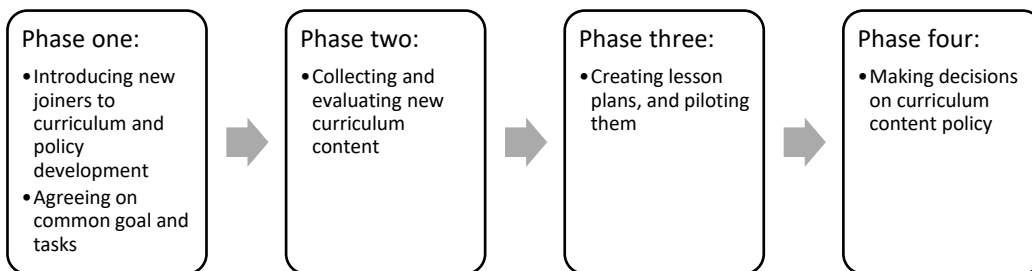
5.2.1 Interaction

The findings in chapter four on interaction presented multiple sets of information to learn from. These were learnings of the processes that foster interaction, the types of interaction, and what factors motivate or limit interaction. In my theoretical framework. I argued that interaction structures for learning should be embedded in the policymaking process to achieve collaborative learning. This argument has been supported by other researchers that found purposeful initiation of structures within organisations to promote interactions, which as a result promoted learning (Yamklin and Ingel, 2012; Yeh et al., 2011; Gilston et al., 2009; Bolam and McMahon, 2004).

5.2.1.1 How are actors interacting?

The findings illustrated an interaction process that the PoliLCs operated within, which is developed and supported by the MOE. The MOE created the Arabic language curriculum policy community as an interaction structure, where actors from within and external to the organization worked collaboratively under one purpose. Participants in the interview reported how each phase of the process supported specific types of interactions with other participants in the PoliLC. The main phases of the process that were reported by actors who were administering the PoliLC (actors MP3, MS1, and ES2), and confirmed by the other interviewed participants (actors US1, ST1, and ST2) are summarised in Figure 5.1.

Figure 5.1 The interaction process of the Arabic language curriculum PoliLC



The four phases of the process purposefully created opportunities for interaction. In the first phase, the whole PoliLC interacted, first, to introduce what the community would work on, and second, to familiarise new joiners with curriculum and policy development. Thus, phase one fostered interactions of policy and curriculum experts with subject teachers and academics. In the second phase, the community was divided into task-oriented groups where in each group there was at least a member of the MOE, a subject expert, a teacher, and an academic subject expert. This phase motivated increased interactions between group members rather than the larger community. The task-oriented groups within the PoliLCs met monthly to share comments and expertise regarding the work that has

been done in the task-oriented groups. This phase fostered increased interactions between teachers, subject experts, and MOE members.

In the third phase, lesson plans were created within each task-oriented group and piloted to collect information on the lesson and curriculum content. Similar to the previous phase, which revolved around interactions within task-oriented groups, the third phase also fostered increased interactions between teachers, subject experts, and MOE members within the same designated task group. In the last phase of making decisions regarding the curriculum content and policy, policymakers within the MOE in addition to subject experts came together to make the final decisions. In this phase, increased interactions were happening between MOE policymakers and the subject experts. In the first three phases, specific interaction mediums were reported by participants, as seen in Table 5.8. No specific interaction medium was referred to for phase four.

Phase	Interaction type	Frequency	Fostered interaction between..
Phase one	Face-to-face meeting and workshop	Three consecutive days annually	All PoliLCs members
Phase two and three	<ul style="list-style-type: none"> • Face-to-face group meetings • Phone calls, phone chat group, and email exchanges 	<p>Once a month</p> <p>As frequently as needed</p>	Teachers, subject experts, and MOE members within their task-oriented groups
Phase four	<ul style="list-style-type: none"> • Not identified in interviews 	<ul style="list-style-type: none"> • Not identified in interviews 	MOE members and subject experts

Table 5.8 Reported interaction types and frequency

Amongst the reported interaction types, interview participants reported that face-to-face models of interaction were preferred for collaboration. This finding aligns with Weiss (1995) and Crandall (1989) where face-to-face interactions were found most convenient for interactions that foster learning. In addition, the findings

from my sample showed on-going interactions and dialogues that took place in all four phases of the process. This finding aligns with the literature on collaborative models of PLCs, CoP, organisational learning, and policy networks, where two-sided interactions are found to support collaboration (Court and Young, 2003). The reported findings from my interview sample were found to support this.

5.2.1.2 *Why are actors interacting?*

To answer the why question of interaction, I engaged with the interviewees' descriptions of factors motivating and limiting interaction. To do so, I went through the quotes from the findings chapter, which were already arranged under themes and listed the factors motivating and limiting interaction under main themes and sub-themes. I then counted the times each theme was mentioned and classified the responses by the participant's centrality. Classifying by participant centrality was an attempt to understand if participants' perspectives on factors motivating and limiting interaction differ based on their centrality. I begin first by tabulating the factors in Table 5.9 to list the main themes identified in factors motivating and limiting interaction. After tabulating the factors, I engaged with the factors thematically to critically evaluate what they mean compared to the wider literature. There are three factors reported to motivate and limit interactions in the learning community explored. These are factors related to the personal characteristics of actors, the division of tasks in the community, and the opportunities to interact.

	High	Medium	Low	Total
Factors motivating interaction				
Personal characteristic of actor				
<i>Effective communication</i>	2	-	-	2
<i>Openness to collaboration</i>	-	-	1	1
<i>Share similar background or experience</i>	-	-	1	1
<i>Capacity for learning</i>	2	-	-	2
<i>Seeking specific knowledge and expertise</i>	1	1	1	3
<i>Sharing expertise with new joiners</i>	2	-	-	2

Division of tasks				
<i>Task requiring joint action</i>	2	1	2	5
<hr/>				
Factors limiting interaction				
<hr/>				
Personal characteristic of actor				
<i>Not open to collaboration</i>	1	-	-	1
Division of tasks				
<i>Tasks not needing joint action</i>	2	1	1	4
Limited opportunities to interact				
<i>Geographical distance</i>	1	1	-	2
<i>Part-time commitment</i>	2	-	-	2

Table 5.9 Reported factors motivating and limiting interaction by actors centrality

Personal characteristic of actors

Personal characteristics of actors refer to the specific factors reported of: effective communication, openness to collaboration, sharing similar backgrounds, capacity for learning, and seeking or sharing knowledge and experience. Each factor is discussed in the order presented above, and linked to the literature to discuss what the findings mean.

Effective communication was put forward as factor that motivated actors to interact with other specific actors. This finding is not supported by the literature of collaborative learnings models. This can be attributed to the fact that little is known about individual-level factors impacting interaction in collaborative settings in policymaking (Stevens, 2018; Howlett et al. 2015). Hence, at this point more research is needed to understand the role of effective communication as a factor impacting interaction.

However, the factors of openness to collaboration and sharing a similar background as motivators for interaction can be supported by the literature, specifically, the concept of mental models or predisposition. Actors come into the

learning community with existing preferences, beliefs, and experiences, which are referred to as mental models (Roberts, 2006; Toole, 2001). Thus, some participants in this study's explored PoliLCs may come into the community with a predisposition and openness to collaborate, while others may not be willing to. The literature also identified that sharing similar beliefs and experiences is a potential factor for interaction (Roberts, 2006). Multiple interviewees reported that similar background and experience motivated their choice of whom to engage with. This finding is also supported in the literature of PLCs, where teachers who shared similar background experiences such as education and subject were found to interact more closely with one another than those who did not (Bolam et al., 2005).

Capacity for learning as a personal characteristic is argued in the literature to be a motivator for not only interaction, but also learning (Stoll, 2009). Two of the high centrality participants reported capacity for learning as a motivator for interaction, which aligns with what the literature argues. The capacity for learning as a personal characteristic is also associated to one of the factors impacting interaction: seeking or exchanging expertise. According to Stoll (2009), individuals with a capacity for learning seek to learn, share learning, and apply learning in various settings. My interviewees reported that those who interacted most often in the community favoured interacting with others who were found to be ready to learn, and seek learning.

Personal characteristics of actors, both in my findings and the literature, indicate specific individual attributes capable of supporting further interaction. These attributes referenced in Table 5.9 above provide practical implications. One possible implication is related to choice of actor. Choosing to include actors in the community who have exhibited qualities such as effective communication, openness to collaboration, and capacity for learning can suggest greater

interaction patterns within the community. Another possible practical implication is to match actors who are found to have exhibited the qualities that support interaction, with those who have not to enhance individual actor skills. This suggested practical implication can be supported by Stoll (2008, 2009), where learning communities support enhancing the capacity for learning in individual actors through interacting in communities of learners.

Division of tasks

The division of tasks refers to a practice whereby the learning community, , is divided to task-oriented groups to achieve the goals of the community. The division happened in phase one of interaction (see section 4.1.3), after all the community members had met and agreed on the goals and objectives of the community. The division of tasks was identified nine times in the interviews as either a facilitator or limiter of interaction (see Table 5.9), and was the most mentioned factor in the sample as a possible influence on individual interactions within the community. Specifically, the task-oriented groups created a sub-structure that made actors interact with a specific number of other actors more frequently.

This phenomenon of purposefully initiated sub-structures can be possibly identified in the literature on other collaborative models. To generalise this finding to the wider literature, I have identified 'joint-enterprise', a variable found in all the explored collaborative models of PLCs, organisational learning, CoP, and policy networks to develop further understanding. Joint enterprise highlights the phenomenon of various actors coming together under a common purpose and goal (Wenger, 1998). Joint enterprise in this study showed that it can further interaction when the 'joint goal' becomes achieving specific tasks through group work. The findings on joint enterprise as a possible promoter for interaction can be

transferrable in other settings beyond policy and PoliLCs. For instance, in the literature of PLCs where teachers work collectively within their community, specific joint tasks may be undertaken by selected actors of the community (Bolam et al., 2005). As a result, some actors may be seen to interact more frequently together compared to others.

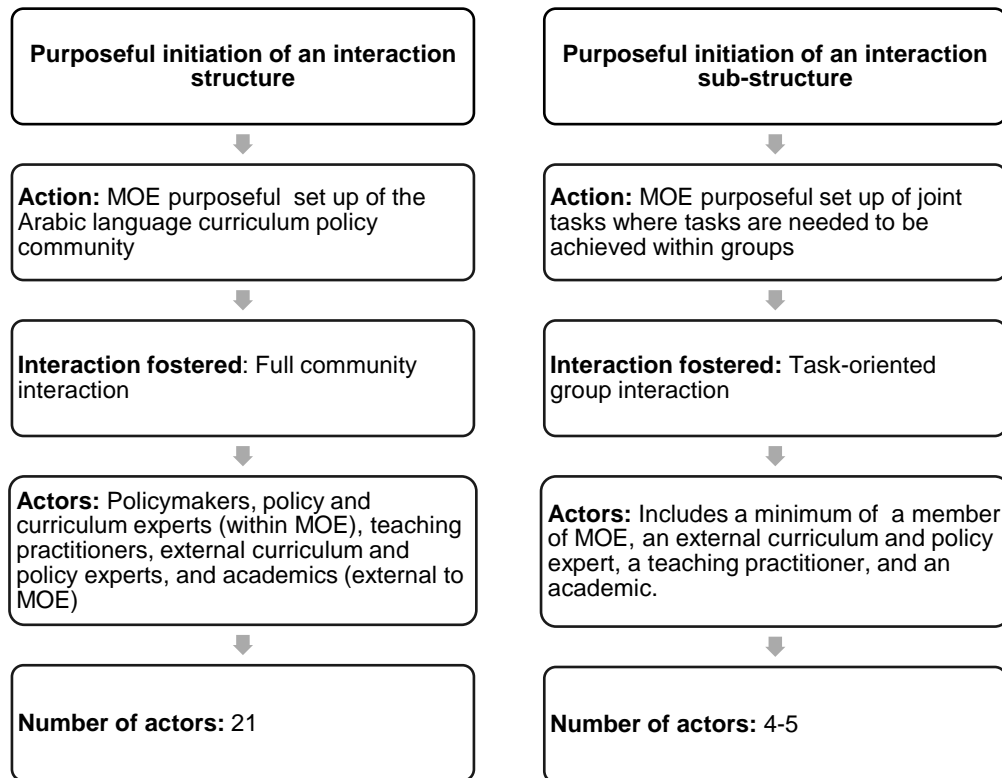


Figure 5.2 A model on purposeful initiation of structure and sub-structures from findings

The division of tasks through sub-structures as a practice found in the learning community explored offers practical implications for a strategy to foster and enhance interaction. In Figure 5.2 above, I illustrate how my findings showed an approach where interaction structures were further fostered by purposeful created sub-structures that interacted further. The PoliLC sample explored had two levels of purposeful interaction structures. One is on the macro level where the MOE gathered various actors under one joint PoliLCs working on Arabic language

curriculum policy; and two, the purposeful creation of task-oriented groups to work across the four phases of interaction which resulted in further group interactions.

By making group work and interaction part of the community processes and goals, the MOE succeeded in creating greater on-going interaction between specific members at the group level, and all community members at the community level. This finding aligns with the literature-backed argument early in this section whereby purposefully created organisational structures support interaction. Thus, if organisations or policy processes want to support greater interaction between actors and with learning, creating sub-structures that collaborate on a specific joint task is capable of enhancing these interactions.

Opportunities to interact

The factor of limited opportunities to interact face-to-face came up in four out of the seven interviews conducted. This finding referred to actors being unable to interact as frequently as they wanted to due to geographical distance from other community members, and their full-time jobs. All the members in the community were involved on a part-time basis, hence, finding time dedicated to interacting face-to-face was a challenge. The literature identifies the important role of time in supporting interaction (Stoll et al., 2003; Brown, 2013). Specifically, for deep interactions that include learning and knowledge mobilisation. Hence, to support interaction in a learning community, organisations must consider setting enough time aside to support these interactions.

However, this suggestion can be a challenge. In the context of this study, which can be the case in other learning communities, actors of the community do not just belong to one organisation. This means that even if the MOE decides to designate time for its members involved in the community to support interaction, other organisations may choose not to. Thus, the role of other mediums of

communication can come in when face-to-face interaction is a challenge. It remains unclear, however, the impact that other mediums of communication may have on learning and knowledge mobilisation. As the literature notes, knowledge mobilisation and deep learning require time and face-to-face interactions.

5.2.2 Learning

This section attempts to discuss the findings on learning and link these to the literature and theoretical framework. I will begin by answering how actors in the community learn, and why. To answer the how question, I examine the current practices of learning and identify what types of learning are present in relation to the literature on learning in collaborative models. I will then answer the why question by discussing and analysing the factors motivating engagement with learning.

5.2.2.1 How are actors learning

In the theoretical framework, I highlighted social learning as an umbrella concept for the learning that takes place through the interaction of PoliLC actors. What is known in the literature on collaborative learning models is that social learning is present when knowledge acquisition happens through social interaction (Hecló, 1974). In the described account of the interaction process in the learning community as seen in Figure 5.1, interview participants described a learning process that is aligned with the four phases of interaction within the explored PoliCs (see Table 5.10).

Phase/ activity	Reported learning and knowledge	Evidence from findings
<p>Phase one</p> <p>Introduce new joiners to curriculum and policy development</p>	<ul style="list-style-type: none"> Curriculum and policy development knowledge (by subject experts both academic, external, and MOE actors) 	<ul style="list-style-type: none"> “Transmitting learning to actors who lack curriculum experience” (MP3, full quote section 4.3.1) “New community joiners with no background in curriculum or policy...were given lessons over three hours each in three days. To learn the A to Z of the curriculum policymaking process” (ST2, full quote section 4.3.1) “That included what is curriculum and policy, how is it developed, how is it assessed...” (ST1, full quote section 4.3.1)
<p>Phase two and three</p> <p>Collecting and evaluating new curriculum content</p> <p>Creating lesson plans, and piloting them</p>	<ul style="list-style-type: none"> Curriculum and policy development knowledge (by subject experts both academic, external, and MOE actors) Knowledge on pedagogy (by subject teachers) Knowledge on curriculum choices from pilot evaluation (by subject teachers) New knowledge development on curriculum and policy through internal evaluation framework (all actors in group) 	<ul style="list-style-type: none"> “There was also continuous dialogue as we were learning, that focused on how to improve the work and task we were doing and where are the gaps” (ST1, full quote section 4.3.1) Actor ES2 who supervises three task-oriented groups shares “on-going feedback and exchange learning and materials with the actors involved” (see section 4.3.1) Actor LP2 reports conducting focus groups “to evaluate curriculum...” (see section 4.3.2) Actor US1 as an academic expert accounts providing “on-going feedback” in curriculum choice process (see full quote section 4.3.1). Actor MP3 reports on an internal evaluation framework of the chosen and piloted curriculum policies “when we have these conversations together, we create new knowledge. The process of creation allows us to exchange information and learning” (see full quote section 4.3.1).
<p>Phase four</p> <p>Making decisions on curriculum content policy</p>	<ul style="list-style-type: none"> Knowledge of policy decision-making (by policymakers in MOE) 	<ul style="list-style-type: none"> Actor ST2 wherein when the policymakers involved “make a decision regarding what is selected.... they would always come back to us. And explain what they chose and why they chose it...we were always given an explanation when the final decision is taken and shown how the decision was reached to” (see full quote section 4.3.1).

Table 5.10 Reported learning in the PoliLC interaction process

The reported learning in Table 5.10 shows a community with on-going and continuous interactions for learning. This finding is aligned with the literature on collaborative models wherein learning is the outcome of engaging with a group of actors (Stoll, 2008; Bolam et al. 2005; Kisby, 2007). Actor MP3, for example, stressed that learning is at its highest when there is interaction with actors of different backgrounds and experiences. The learning found to be shared through the interactions of the learning community actors is illustrated in Figure 5.3.

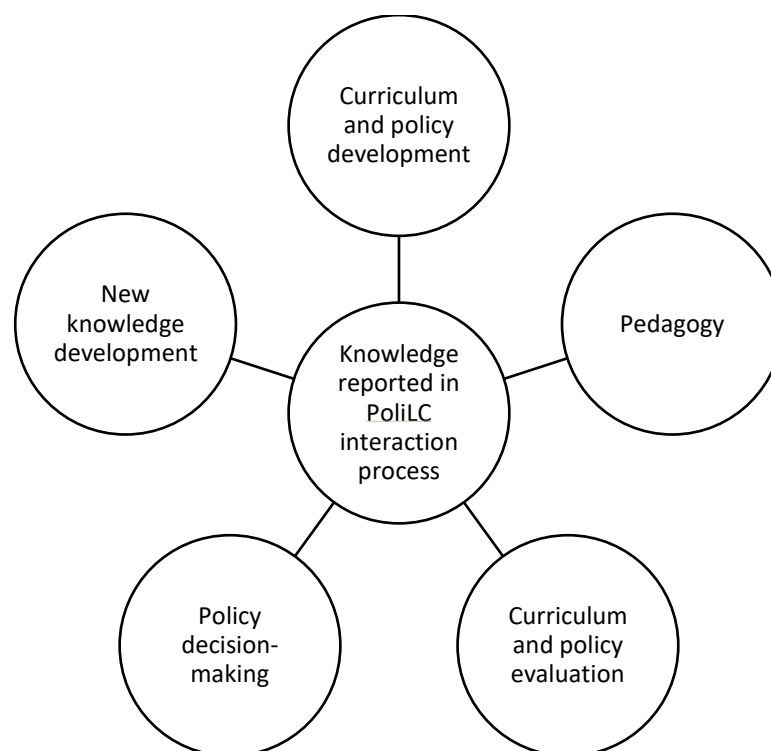


Figure 5.3 Knowledge reported in PoliLC interaction process

The findings of this study on the areas of knowledge found in the PoliLC align with the theory of ‘networked learning’ (see Jackson and Temperley, 2007) that was highlighted in chapter two. According to Jackson and Temperley (2007) there are three fields of knowledge in collaborative models: public knowledge, practitioner knowledge, and new knowledge. In the PoliLC public knowledge was identified through the learning from knowledge, research and

best practice that was shared by the actors in the group. Practitioner knowledge was found in all the learning interactions that focused on actors sharing curriculum, policy, and pedagogical knowledge from their experience. New knowledge was the co-created knowledge that actors in the PoliLC developed together through engaging in inquiry and evaluation as seen via conducting the pilots and focus groups.

In addition to the knowledge reported by PoliLC participants in Figure 5.3, participants reported specific learning resources made available to them by community members. The learning resources with the times each was mentioned are noted in Table 5.11.

Learning resource	Times mentioned
A. Curriculum and policy documents from other countries	2
B. Resource books (language, curriculum, and policy)	1
C. Focus group and pilot	2
D. Previous curriculum and policy	1

Table 5.11 Learning resources reported available to PoliLC members

Three of the learning resources available (A, B, and D) can be categorised as public knowledge in Jackson and Temperley's (2007) networked learning framework, wherein the fourth learning resource reported (C) fits within the new knowledge category in the framework as it is knowledge constructed by the community members collaboratively. The alignment of my findings with the networked learning fields of knowledge is an example of how learning from the collaborative models in other contexts can be transferred to other settings. Networked learning was developed over the idea of PLCs, which are an in-school concept of interaction. Yet, it provides theoretical implications that cross beyond context.

Thus, findings on concepts of collaborative learning from this study have the potential of being applicable to a wider context than policymaking.

However, the focus on the policy setting is a way to recognise and understand how learning manifests in the specific context of policymaking. For instance, in my focus on understanding learning in policymaking, I argued in the theoretical framework that the policymaking process must find a way to formally foster learning. One of the suggestions put forward was the role of the linear policy process in integrating learning, where I argued that linearity in policymaking may offer a systematic opportunity for learning to be integrated in policymaking. Specifically, the public policy context is inclined to operate in a bureaucratic nature, which makes linearity more likely to be present (Jabbara, 1989; Birkland, 2011).

The findings on learning in the PoliLC as seen in Table 5.11 demonstrate a systematic integration of learning in the decision-making process of curriculum and policy development. The interaction phase being linear offered a systematic model for learning to be fostered and engaged with. As actor ES2 pointed out “learning is a present variable in our process”, and actor ST2 added on “the process allowed us to attain the knowledge from those with curriculum and policy expertise, and utilise it in practice”. The reference to the learning practices of the community using the word ‘process’ insinuates alignment with the linearity assumption put forward by this study. With the interaction phases demonstrating a linear ‘policy process’ for Arabic language curriculum, this PoliLCs has achieved a systematic form of integrating learning into the process.

As such, the findings align with Nutley et al.’s (2007), where the clearer and more linear a policy process is, the more likely it is that learning will be used in a logical manner. Also, the literature supports the assertion that if learning is integral to dominant actors in the policy community, that learning will play a dominant role in the policymaking process (Sheldon and Chilvers, 2000).

This has been the case in this policy community where the policymakers and community administrators viewed and supported as important for the process of policymaking. As actor ST2 maintained:

“Policymakers wanted us to learn, this was clear as they constantly maintained a collaborative learning environment as the community was working, and constant knowledge sharing was encouraged and done.”

This finding on the systematic integration of learning in the community process has wider implications for practice and theory. For organisations seeking to enhance learning in their decision making process, having phases of joint action can provide opportunities for social learning to manifest in a community setting. A similar finding has been found in Stoll's (2008) accounts of three PoliLCs, through the practice of assigning learning activities. In the three cases, there was reference to learning activities that were undertaken and led by the PoliLCs team, which resulted in increasing specific learning interactions such as the use of research as a learning resource. This is also supported by Yamklin and Igel's (2012) study of a CoP, where an intentional linking of community performance goals with learning activities achieved improvement in learning and organisational performance. In this section, I have summarised the accounts of the reported learning that took place within the PoliLC explored, where it was deliberate, systematic, and inclusive of public, practitioner, and new knowledge. In the next section, I will summarise the accounts of what motivated actors to learn.

5.2.2.2 Why are actors learning

On the one hand, the interview participants reported two main reasons for engaging with learning where: one is facing uncertainty, and when one is engaging with actors who seek learning. On the other hand, the SNA questionnaire sought to explore two ties of learning in the community: seeking advice, and sharing or exchanging learning resources. Together, both the

interview and survey examination of actors' interactions with learning can be seen to support one another. When actors face uncertainty they are found to seek advice from other community members to address their doubts, which is a potential explanation for interacting due to advice seeking. Similarly, when actors engage with other actors who are seeking learning from them, actors become involved in exchanging knowledge, which explains interactions for knowledge exchange.

What this finding means is that the motivators for learning reported by the participants are the same motivators that lead to learning interactions. It was earlier noted that collaborative learning models and networks in policy settings are a result of attempting to address a 'wicked' problem collectively (Rittel and Webber, 1973). In doing so, learning appears in this study's explored community to manifest systemically as a mechanism of collective problem solving. When networks and communities are set up to address a problem, the opportunities for learning in this initiated structure are heightened. Specifically, as the goal and mission of this structure is to address a problem, actors involved consult one another in a continuous learning process to achieve this goal.

Of the 19 actors who participated in the SNA survey, 285 interactions were described as seeking advice, and 193 were exchanges of knowledge. On average, that is about 15 interactions per actor seeking advice and 10 interactions per actor exchanging knowledge materials. Table 5.12. calculates the number of interaction ties reported for each of the advice tie the SNA survey measured, and each of the knowledge exchange ties.

Number of reported source of expertise interactions	Number of reported source of research based advice interactions	Number of reported general advice interactions	Total ties of advice interaction reported
112	91	84	285
Number of reported curriculum learning material exchanges	Number of reported joint inquiries to research and evaluate exchanges	Number of reported collaboration for curriculum and policy improvement exchanges	Total ties of knowledge exchange interaction
69	58	66	193

Table 5.12 Number of interaction ties reported for advice

The actors who were sought out for advice the most in the community and were found to exchange knowledge the most were actors MP3, MS2, and ES2, the same actors who administered the policy community, and shared between them the greatest number of years of experience in curriculum and policy development. These findings reflect what the literature frames as knowledge brokers and knowledge mobilisers, who intentionally engage with other actors to proactively share resources (Carlsson, 2000; Jackson, 2003). However, it is not clear if the professional role of these actors in the policy community as administrators of the community plays a role in how they interacted, specifically, if part of their duty in administering the policy community is to maintain a high exchange of learning interactions.

The findings from the interviews on why actors report engagement with learning highlighted the impact of expertise, the ability to learn, and sharing learning to be central factors impacting their personal engagement with learning. These findings align with the concepts of capacity for learning, wherein, actors with higher capacities for learning are more likely to be sought for advice and knowledge mobilisation. In addition, the finding on expertise, which is a theme also mentioned in what motivates interaction (section x.x), is aligned with Rickinson's (2005) identification of the impact of educational levels and expertise on the likely utilisation of learning.

This section has linked research findings on how and why actors learn with what is known from the literature to build further the theorisation of PoliLC. The research findings demonstrate alignment with literature, and when possible, how the findings propose additional understanding and knowledge. In the next section, I focus on the role of research and evidence utilisation as a one point of learning through interaction within the PoliLC explored.

5.3 The Uptake of Evidence to Inform Policy

The aim of this section is to first, discuss the account of the current role of evidence and research in the explored learning community; and secondly to, identify factors motivating and barriers to utilising evidence and research in the setting of a policy learning community.

5.3.1 Role of evidence and research utilisation

Interview participants reported the use of evidence and research in the phases of the interaction process in the learning community as illustrated in Table 5.13.

Phase/ activity	Evidence on evidence use from findings in chapter four	Section with evidence
Phase one Introduce new joiners to curriculum and policy development.	<ul style="list-style-type: none"> • Latest international research on language science, curriculum, policy, and implementation 	<ul style="list-style-type: none"> • Quote by actor ST2 in section 4.4.1
Phase two and three Collecting and evaluating new curriculum content. Creating lesson plans, and piloting them.	<ul style="list-style-type: none"> • Personal expertise exchange • Previous and current internal curriculum evaluation documents • Results from teachers surveys and class observations 	<ul style="list-style-type: none"> • Quote by actor MS1 in section 4.4.1 • Quote by actor MP3 in section 4.4.1
Phase four Making decisions on curriculum content policy.	<ul style="list-style-type: none"> • Teachers feedback on curriculum pilot • Knowledge provided by subject experts 	<ul style="list-style-type: none"> • Quote by actor ST1 in section 4.4.1 • Quote by actor MS1 in section 4.4.1

Table 5.13 Evidence and research utilisation in PoliLC interaction phases

The mentioned research and evidence sources included a range of published research, actors' expertise, evaluations, teacher surveys, observation, feedback on pilots, and knowledge from subject experts. One worry I had when discussing 'research and evidence' is that actors would assume I meant only published research. However, using the definition of evidence provided by the UK's Cabinet Office (1999) was helpful. The definition of evidence I used is inclusive of what all the actors reported as sources of evidence. The ways in evidence was found to be used in the various phases of the PoliLC interaction process model Weiss' (1979) interactive model of research use, wherein research enters the decision process as part of policymakers' search for knowledge. While Weiss singly highlights published research, I expand 'research' to include other forms of evidence found in the Cabinet Office's (1999) definition.

The use of published research sources was mainly reported in the first phase of the interaction process, and was inclusive of international research on language, curriculum, policy, and policy implementation. The phases in which curriculum content was sought and decided on focused mainly on expert knowledge and results from the pilot evaluation. A possible explanation for this is found in actors noting the lack of Arabic language curriculum research, which meant more use of international research. As a result, the research that was engaged with does not directly relate to the subject but attempts to enable learning by benchmarking against practices in the literature of teaching language such as English, for instance. For the phases in which the curriculum policies were developed in the PoliLC, learning was dependent on what was known from the pilots and the opinions of the experts and practitioners involved.

While the interviewees described engaging with research and evidence use, it remains unclear what impact this engagement had on the actual policy decisions. In Malchup's (1993) six forms of evidence utilisation, interviewed participants reported achieving the sixth form where they received, read, understood, and allowed evidence help them make a decision. This can be seen in section 4.4.1 where participants used the words 'used', 'shared', and 'informed' to describe evidence use. However, my interview questions did not attempt to draw more information from policymakers on the extent to which pilot result and expert knowledge directly impacted their final choices. This, however, is a challenge identified in the literature, which states that it is rare to find direct influence of research on policies (Weiss, 1979). Specifically, research and evidence are but one source to inform policymaking, with policymakers being impacted by their values, beliefs, and ideologies.

One aspect where this study's findings challenges the literature is in disregarding evidence due to lack of context and credibility. The literature

argues that policy is often implemented without evidence, as it is can be disregarded due to lack of context and credibility (Maynard, 2006; Weiss, 1991). In the case of this study, the second, third, and fourth phases of interacting with evidence reported instances of evidence shared by trusted actors within the community - actors that are both seen as credible and context relevant. In particular, as the evidence shared during the last phase is from pilots of the proposed curriculum content, this makes it directly relevant to the policymakers' decisions on the curriculum content policy. As such, within the practices of the PoliLC explored, evidence and research played a significant role in the process. While it is not clear how direct the influence was on the final policies made, it remains a reference point in making better-informed choices (Davies, 2004). I discuss next the factors and barriers impacting evidence and research use in the community to identify lessons for furthering evidence-informed policymaking in the UAE.

5.3.2 Factors motivating evidence and research utilisation

The findings from my PoliLCs showed that there are two factors that motivate evidence and research use: 1) developing the policymaking choices related to the curriculum; and, 2) enhancing actors' teaching practices. The literature on collaborative learning models identifies a focus on development as one of the main five dimensions supporting these models. For instance, in the policy literature, networks are created in organisations to improve policies or address policy problems (Cummings et al., 2007). Similarly, in my findings, using evidence and research was seen as a form of learning helpful for improving and addressing the policy problem at hand. In addition, actors reported the use of evidence and research to enhance personal teaching practice. These findings align with the literature on PLCs where engagement

with evidence in can play a role in improving teachers' practices and thus improving student learning (Stoll et al. 2006; Bolam et al. 2005).

The implication of these findings for practice manifests in how community and network structures as frameworks can engage actors with evidence use to improve the outcomes of the community. When PoliLCs are set up with a purpose of interacting with learning to address a common goal, evidence and research have a greater opportunity to play a role. Particularly, as the community bridges the gap reported in the literature between policymakers and academics by having them collaborate for learning together (Bogenschneider and Corbett, 2010; Dunn, 1980). As such, actors within the community identified evidence as a means to achieve improvement in policy, in particular when they became aware of how learning and knowledge acquisition supported making better decisions. Hence, supporting the awareness of how evidence can support decisions is also a practical implication of the findings from the research.

5.3.3 Barriers to evidence and research utilisation

The findings chapter identified three barriers to evidence and research utilisation, which related to: the evidence and research in their selves, individual factors, and organisational factors. A summary of the barriers is listed in Table 5.14 to allow a discussion of how the findings on barriers to evidence relate to the literature.

Area of barrier	Barriers reported in findings	Evidence from findings
Evidence and research	Availability	Quote by actor ES1 and MP3 in section 4.4.3.1
	Practically	Quotes by actor US1, ES1, ST1, ST2, and LP2 in section 4.4.3.1
	Quality	Quotes by actor US1 and ST2 in section 4.4.3.1
Individual factors	Capacity for learning	Quotes by actors ST2 and ES2 in section 4.4.3.2
Organisational factors	Time of participants involved	Quotes by actors MP3, ST2, US1 in section 4.4.3.3
	Alignment of practice with evidence use	Quotes by actors ES2 and, ST2 in section 4.4.3.3
	Support for evidence identification and development	Quotes by actors ST2, MS1, and US1 in section 4.4.3.3

Table 5.14 Reported barriers to evidence and research utilisation

In the literature review under the research and policy gap, I highlighted a number of reported barriers in the literature on research and evidence utilisation. As such, I use the summary here to compare and contrast my research findings and offer lessons to how organizations and individuals can overcome these barriers.

<i>Evidence</i>	<i>Individual</i>	<i>Organisational</i>
<ul style="list-style-type: none"> • Quality • Credibility • Relevancy • Availability 	<ul style="list-style-type: none"> • Personal characteristics • Capacity to engage with evidence • Belief and ideology 	<ul style="list-style-type: none"> • Vision • Organisational culture • Resources • Engagement with evidence

Table 5.15 Summary of barriers to evidence utilisation from the literature

In comparison to my participants' reported barriers, half of those identified in the literature were mentioned in the interviews. First, in the barriers related to evidence, participants in my study reported a lack in available research done for the Arabic language subject. With limited resources available, the community had to engage with international research or self-

collected primary data on language instead and attempt to transfer learning. The first part of this finding has been reported in the literature, where policymakers identify access to research as a barrier to their interest in using evidence (Percy-Smith et al., 2002; Booth et al., 2003). The second part of my findings on availability however, is not found in the literature, where actors and policymakers in the community attempt to conduct their own primary research to supplement the unavailability of evidence.

The lack of research practicality is the most reported barrier to evidence use. Mainly, this is due to the lack of Arabic language curriculum research, which as a result is supplemented by using benchmarking research from other countries on different subjects. As such, participants reported that research and evidence published for the Arabic language is very theoretical and lacks applicability and quality where it is not practical for either policymakers, academics, or practitioners. These findings align with the literature where evidence users complain that research does not align with their practice, falls short of offering practical knowledge, and is irrelevant to the day-to-day work of policymakers (McKenna et al. 2004; Davis, 2000; Nutley et al., 2007).

According to the literature, research that is identified as of quality is more likely to be used or read by both policymakers and practitioners (Nutley et al., 2007). In addition, policymakers and practitioners will trust research from credible organizations or individuals (Court and Young, 2003). Both these literature arguments have been found in my research, where, from an academic point of view, actors reported that there was always a question on the quality of the research used, and from a practitioner point of view, voiced their struggles in finding reliable sources. But, in addressing this challenge, actors trust the subject experts in the community to supply research of quality.

Capacity for learning is the most common theme as a motivator or barrier for interaction, learning, and evidence and research use. Actors reported their lack of skills in knowing how to seek, read, and use research as a barrier to research and evidence use. Actors who came from an academic background, and were more familiar with research, reported taking initiative in sharing research and evidence with others, while actors with no research background, such as teachers, reported the need to be trained with specific skills to support research use. Similar findings in Rickinson (2005) show that those with higher levels of education or those who have engaged with research previously are more likely to use research. Also, actors who are capable of using research tend to have more positive approach towards evidence and how it influences their work (Nutley, et al., 2007; Rickinson, 2005).

As for organisational factors, participants in the community reported the lack of organisational support for funding research to support curriculum policymaking as a barrier. Interview participants called for organisational support to build an infrastructure for the development of research and evidence. According to Sheldon and Chilvers (2000), when evidence is integral to the vision of the organisation, more resources need to be put into place to support its use. This means that to get the support they call for, research and evidence must be integral to the vision of the organisation and not only the community. As reported by participants, the PoliLCs does view research and learning as integral, but the community is within a larger public organisation, which may or may not share the same commitment for research use.

Another organisational factor that was addressed was the inability to commit full-time to the PoliLC. In particular, the community is not set up for informing policy only, but for actually creating curriculum content policy and making decisions on it. As such, these tasks are seen by participants to require

full rather than part-time participation in the PoliLC to be effective. The finding on the need for time to use research has been found in the literature as a main barrier reported by policymakers (Sheldon and Chilvers, 2000; Rickinson, 2005). The lack of time and resources to support the development of research restricts the inclusion of evidence, and limits the formation of evidence-based practices within the organisation (Rickinson, 2005).

However, the literature does not touch upon the requirement for full-time involvement of community members in a learning community, which was suggested in this study's PoliLC. This finding comes as a surprise, particularly as before conducting the research I had not explored whether the learning community was involved in practices that demanded greater time from participants. Previous examples of collaborative learning models and the three cases of Stoll's (2008) PoliLCs did not demonstrate communities where the tasks implied by the stated goals required a large amount of time and dedication from members involved.

In this section, I discussed three main challenges to evidence utilisation that my sample reported, where all were also found in the literature. The implications of my research findings focus on two practical aspects. The first is the need for organisational resources to support finding, conducting, and disseminating research and evidence to the policymakers and communities within the organisation. This means that the MOE needs to begin to view the importance of evidence and research to the practices of its curriculum and policy departments, and invest resources in supporting evidence utilisation. Another suggestion is to have full-time MOE employees within the curriculum department who are charged with supporting policymakers and curriculum learning communities across the MOE with evidence and research resources. The second is that participants in the learning community or members of the

curriculum department at the MOE are provided with the necessary training and exposure on how to use research and evidence to improve both personal practice and policy-making.

This section discussed the findings on learning and linked these to the literature and theoretical framework. I began by answering how actors in the community I explored learn, and why. To answer the how question, I examined the current practices of learning and identified what types of learning were present in the literature on learning in collaborative models. I then answered the why question by discussing and analysing the factors motivating engagement with learning.

5.4 Conclusion

The goal of this chapter was to use the main findings from the study to answer the main three research questions. In doing so, I engaged with both research findings and the literature to identify the extent of the alignment between this study's findings, and the theory on PoliLCs, learning communities and social learning. I began first by matching the theoretical understanding of PoliLCs developed in chapter two with the empirical findings and determined if the concept explained the phenomenon I explored. In doing so, I argued that my sample can be characterised as a PoliLC and has the dimensions of collaborative learning models present in it as well.

I also focused on how and why actors in the PoliLCs interact with one another and seek learning. In doing so, I first presented a description of how interaction and learning was reported by participants, followed by why they reported seeking interaction and learning. Throughout the findings chapter, I constantly quoted interviewees with referencing their network measure under a letter after their code to identify if they had high, medium, or low 'centrality measures'. The purpose of doing so was to see if the frequency of their

interaction in the community impacted on what is being reported by participants from the three groupings on learning, interaction, and evidence utilisation. There were no noticeable findings worth mentioning in my analysis of the interview data. As such, it remains unclear if participants' 'centrality' impacts learning and interaction in PoliLCs. More research needs to be conducted to identify any impact.

The third section focused on exploring what lessons can be learned from my sample to further the practice of evidence-informed policymaking. Before finally concluding, I want to take a step back and review the assumptions put forward in my theoretical framework to comment on the extent to which my findings supported them. In my theoretical framework of effective PoliLCs, I put forward the following two assumptions:

- 1) Learning is at the core of effective PoliLCs, and by learning I refer to three learning practices: social learning, knowledge mobilisation and utilisation, and evidence-based decision-making.
- 2) To achieve these three learning practices effectively, the following supporting variables are critical: the creation of interaction structures, embedding learning in the policymaking process, and developing the capacities for learning of the participants.

For the first assumption, my sample showed the presence of social learning (section 5.2.1), knowledge mobilisation and utilisation (section 5.2.2), and evidence-based decision-making (section 5.3.1). As such, for the assumption I put forward, my explored PoliLC has learning at its core. As a concept in the policy context, this offers insights into a learning-centred framework of interaction that has not been explored previously.

The second assumption I put forward focuses on support variables to achieve the learning in the first assumption. In my study, a purposefully initiated

interaction structure was identified, which showed on-going interaction between experts, academics, and practitioners to achieve the goals collectively (section 5.2.1). The embedding of learning in the policy process has been also identified in interviewee accounts and through the interaction phases of the PoliLC (section 5.2.2). The capacity for learning has been identified as a critical factor to the interactions that take place in the PoliLCs, the learning, and the use of evidence and research. The PoliLC reported personal attempts by individual actors to support developing the capacities of other participating actors. Yet, the role of individuals is limited compared to the role of the organization if resources are put into supporting the development of capacities of the participants.

Thus, the theoretical framework I developed using the literature, has effectively shaped this empirical investigation of PoliLCs. The research findings align with my theoretical framework, and arguments in the literature. As the concept of PoliLCs remains at its early stage, my investigation is an attempt to create a systematic method and framework to explore the concept more holistically than previously (as an extension to the concept of PLC). In addition, my study offers future researchers a model of how we can look at collaborative learning in policymaking through a framework distinct to the nature of policymaking.

6 Conclusion

My thesis began with the aim of exploring the potential role of learning in public policy as a means to improve policy decision-making. In particular, collaborative learning between actors in policy communities was seen as a possible means to facilitate knowledge mobilisation in the policymaking process. After undertaking the literature review, the concept of PoliLCs was identified as a potential exploratory model to guide this study's exploration of collaborative learning in public policy. However, the concept of PoliLCs is in its early phases of conceptual development in the literature, with the only publication being those of Stoll (2008) and Brown (2013) touching upon the concept theoretically but not empirically. Hence, in order for this study to explore PoliLCs as a potential framework for understanding collaborative learning in policymaking, I took on the task of underpinning the concept theoretically, so as to conduct related empirical research. I mainly grounded PoliLCs within the philosophical or research paradigm of social constructivism with leanings towards the works of Piaget (1977), Vygotsky (1978), and Dewey (1916), in which learning is an active process sought in a social interaction context. Thereafter, the literature review focused on identifying alternative models with similar theoretical underpinning to PoliLCs. The purpose of doing so was to identify whether and to what extent the concept of PoliLCs can offer a novel framework for the study of collaborative learning in policy settings.

As such, a definition of PoliLCs was arrived at, central to which was the notion of facilitation of social learning, knowledge utilisation, and evidence use to support policymaking decisions. The theoretical framework in chapter two argued that these require the support of interacting supportive

processes, structures, and capacities. After my attempts to theoretically underpin the concept of PoliLCs, the study proceeded to use the concept to explore an existing policy community of 21 actors in the UAE that works on Arabic language curriculum policymaking. As such, the thesis sought to answer the following key questions:

- What can be learned from the collaborative learning practices of the Arabic language curriculum policy community in the UAE to explore the conceptualisation of PoliLCs?
- How and why do actors in the Arabic language curriculum policy community in the UAE engage in social learning, knowledge mobilisation, and research utilisation?
- What lessons can be learned in relation to furthering evidence-based policymaking in Arabic language curriculum policy in the UAE?

A case study approach was adopted and supported with the use of in-depth interviews with seven policy community members. In addition, a SNA survey instrument was used to collect demographic data and information on reported interaction between 19 community members. The key assumption behind my investigation of the UAE curriculum policy group as a possible form of a PoliLCs was the view that the policy process could benefit from applying this framework when formulating policy. In this final chapter, I summarise the main findings and discuss their implications and recommendations. I then discuss this thesis' contribution to knowledge, relevant limitations, and avenues for future research.

6.1 Summary of findings and implications

The findings of this thesis were obtained mainly through data collected through seven in-depth interviews with policy actors within the Arabic language curriculum policy community in the UAE. In this section I summarise and reflect on the main findings, and engage with what they mean for the conceptualisation of PoliLCs. As such, I discuss how the

findings present PoliLCs as: 1) a structure for policy development; 2) a systematic model for the integration of interaction, learning, and evidence utilisation in policymaking; 3) a model enhanced by individual capacities for learning; and 4) a model capable of supporting evidence utilisation in policymaking.

6.1.1 PoliLCs as a structure for policy development

The concept of PoliLCs was defined through the literature review as an interaction structure for collaborative learning. In particular, a structure in policymaking that allows policymakers to engage with diverse participants in an attempt to exchange learning for policy improvement. When faced with challenging policy problems as argued by Rittel and Webber (1973), such as the challenge of addressing the Arabic language curriculum policymaking in the UAE, policymakers require collective problem-solving approaches. This study found that the studied policymaking community aligns with the findings from Stoll's (2008) PoliLCs cases, and Carlsson's (2000) network typologies when it comes to the characteristics of the community. This particular PoliLC was found to be:

- Based in a policy context and purposefully initiated by the government
- Included participants beyond the boundary of the government
- Included activities of joint learning and knowledge exchange

My findings, however, in regards to the purpose of the PoliLCs and its modes of interaction, provided new insights to consider. For the purpose of this study, the policy community I explored was initiated to support policy development, which at this point, aligns with Stoll's (2008) PoliLCs cases, and Carlsson's (2000) policy network typologies. However, my sample community was involved in more than supporting or informing policy; it was involved in the actual process of creating, piloting, and implementing policy.

As such, the frequency of interaction between community actors in my sample was also not aligned with the literature on policy communities, as it showed higher interaction frequency as a result of engaging in policy development. Yet, for learning - the central concept in PoliLCs - frequency of interaction is argued to suggest its successful utilisation (Huberman, 1990; Dentler, 1984; Peterson and Emrick, 1983).

PoliLCs as a structure for supporting policy development has multiple implications for policymakers, experts, and researchers. Policymaking institutions that are interested in promoting learning within their decision-making processes can purposefully initiate interaction structures, through adopting the model of PoliLCs. This will require organisations to provide resources that support learning and interactions, such as time and access to learning opportunities. Interaction structures such as PoliLCs can offer opportunities to policymakers to engage with various expertise and learning opportunities that can benefit the policymaking process. In the case of curriculum development in the UAE where there is shortage in curriculum, policy and subject expertise, PoliLCs as an interaction structure for policymaking offers a greater opportunity for supplementing current shortages of expertise in MOE by engaging external experts. In the long run, these interactions with external experts can support enhancing the skills and knowledge of policy actors involved in the learning community.

For the practitioners, subject experts, and researchers involved, the PoliLCs as an interaction structure in policy development presents an opportunity to develop personal knowledge of policymaking in the UAE. An understanding of the policy process allows external actors to the MOE to identify ways in which their knowledge and expertise can be exchanged to support the policy development process further. For researchers, PoliLCs

provide a framework to look into learning in collaborative settings of policymaking, hence providing an opportunity to collect information on learning and knowledge utilisation in policy communities.

6.1.2 Systematic mechanisms of increasing interaction, learning and evidence use in policy communities

Another important finding that this study identified is a practice whereby learning interaction and evidence use is facilitated in the PoliLCs. This was achieved through a practice of tracking stages of how the community worked together, and distributing tasks within each stage between community actors to work collaboratively. Within these tasks, there was a requirement to engage in exchanges of learning and evidence. This practice of aligning specific joint tasks with a learning goal has been found in Yamklin and Ingel's (2012) research, where it was identified as supportive of organisational learning and performance. In addition, the process of joint tasks is identified in my findings as a facilitator for actors' interactions with one another, and a contributor towards learning exchanges and evidence utilisation. This finding aligns with Nutley et al.'s (2007) argument where linear processes in policymaking are likely to enable learning use in a logical manner. In addition, the concept of joint tasks as a practice has been found in the literature of CoP and PLCs where it was identified to facilitate interaction and collaborative work in communities (Wenger, 1998; Bolam et al., 2005).

The main implications of this section are relevant to organisations and policymakers administering policy communities, and interested in promoting learning and knowledge mobilisation within these communities. By purposefully initiating joint tasks in a policy community, the potential for increasing interactions between actors in the community increases. When

these joint tasks are attached to a requirement or expectation of using learning and evidence, learning is integrated systematically into the process of the policy community, as identified in my findings.

6.1.3 Capacities for learning as a facilitator for knowledge mobilisation and evidence utilisation

The findings from the SNA survey as well as reports from the interviews highlighted that the actors who were sought the most for advice and knowledge exchange demonstrated higher capacities for learning. Capacity for learning - the quality that allows people to routinely learn from the world and apply learning - was also reported in the interviews as a significant motivator encouraging actors' interaction with one another. The literature on capacities for learning indicates that it is a facilitator for individuals engaging with and/or seeking learning from other individuals (Stoll, 2009; Nutley et al., 2007; Rickinson, 2005).

The involvement of actors with higher capacities for learning in a PoliLCs drives in additional benefits for the learning of the community as a whole. An example of such benefits was identified where actors with higher capacities for learning took on the role of knowledge brokers, and proactively shared learning and expertise with community actors. This exchange of knowledge facilitates filling learning gaps between the more knowledgeable in PoliLCs in terms of policy experience, and the new joiners. This finding aligns with Vygotsky's (1978) 'more knowledgeable other' notion, where learners seek those with higher ability of understanding for specific tasks to learn.

The implication of capacity for learning is specifically relevant to policymaking organisations, and policy actors involved. For policymaking organisations, the choice of actors with capacities for learning for policy

community participation is important. Specifically, as these actors can act to proactively promote learning across the community. In addition, policy actors in the community themselves can benefit from interacting with actors who have higher capacities for learning to improve their own capacities. As argued by Stoll (2008), individual actors can enhance their individual capacities for learning by being involved in learning communities. In the context of the UAE, the PoliLCs as a model for enhancing individual capacity for learning has the potential of addressing some of the multiple challenges facing education policymakers. Such as: increasing the capacity of policy community actors involved to supplement the shortage in curriculum and policy experts, and enhance actors' individual skills for engaging in policy evaluation, and research use in the policy development process.

6.1.4 Evidence utilisation in policymaking requires more than collaborative learning interaction structure

While my policy community reported a great deal of interaction and exchange of learning as a result of the PoliLC structure, the structure itself is not an assurance for evidence utilisation in policymaking. I argued in the theoretical framework that PoliLCs have the potential in supporting evidence-informed policymaking, and while the structure of PoliLCs allows greater opportunity for evidence exchange, it is not always present. In the case of my explored community, policy actors involved reported keenness for utilising evidence. Yet, the lack of practical, relevant, and context-related evidence, which was also found in the literature on research use (Davis, 2000; Nutley et al., 2007), hindered their ability to do so. Hence, when incorporated in an organisation, PoliLCs as a mode can offer opportunities for increased social learning and knowledge mobilisation. However, if we

are seeking to mitigate the research-policy gap, more needs to be done to understand how evidence and research can be supported to play a greater role in PoliLCs in different contexts.

The implications of my research findings focus on two practical aspects. One, is the need for organisational resources to support finding, conducting, and disseminating research and evidence to the policymakers and communities within the organisation. This means that the MOE must begin to connect the importance of evidence and research to the practices of its curriculum and policy departments, and invest resources in supporting evidence utilisation. In order for that to happen, MOE should consider having fulltime employees within the curriculum department who are charged with supporting policymakers and curriculum learning communities across the MOE with evidence and research resources.

The second practical aspect of my findings is that participants in the learning community or members of the curriculum department at the MOE are provided with the necessary training and exposure on how to use research and evidence to improve both personal practice and policy-making.

6.2 Contribution to knowledge

The study aimed to achieve four areas of knowledge contribution: theory development of the PoliLCs concept; model development to explore PoliLCs in practice; a contribution to the SNA methodology; and a contribution to the context of policy making in the UAE.

First, through the literature review, this study has contributed to exploring the theoretical grounding of PoliLCs by: 1) putting forward a literature-supported definition, 2) identifying dimensions and features of PoliLCs, and, 3) differentiating the concept of PoliLCs from alternative

models. Together, the contribution to exploring the concept of PoliLCs has enabled the development of the theoretical framework or 'model' to investigate PoliLCs (see chapter two, section 2.3.4).

The theoretical framework put forward is a novel model, supported by the literature, to research PoliLCs. The model put forward provided a guiding outline for my exploration of the PoliLCs concept in practice, and can act as a model to aid future explorations of learning in the policy process.

The study has also contributed to methodology by adopting a SNA survey to collect demographic data on participants, and network data to identify the interview sample. This approach utilised a SNA survey as a sampling technique to identify actors for network-determined features; in this research, this was for centrality measures, as in the number of interactions reported between them and other network actors. This actor identification based on a network measure would otherwise be hidden to the researcher if collected only through interviews.

The study has also contributed to collective knowledge of learning, interaction, and knowledge mobilisation of policy actors in education in the UAE. Publicly available policy research is scarce in the UAE, and thus, this study contributes to and extends the limited policy research available.

6.3 Limitations

There are several limitations of this study to be noted. These include limited previous research on PoliLCs and policymaking in the UAE, the broad aim of this research, sample, and methodology.

The lack of previous research as a limitation in this study is present two-fold: first, the lack of peer-reviewed published research on policy and learning in the UAE; and second, the shortage of literature on the PoliLCs concept.

While I highlight these identified literature gaps as limitations, they can be seen as an advantage as this study builds upon the shortcomings of the literature. The lack of policy and learning research in the UAE was supplemented by learnings from the Western literature of public policy, while contextualising these learnings in relation to the limited published works on the UAE. The newness of the PoliLCs concept in the wider policy literature meant that identifying previous research on the concept was a limitation. The lack of previous empirical research on PoliLCs presented a challenge as to the choice of method, scope of analysis, and depth of discussion. To address this challenge, I critically engaged with the existing works on PoliLCs by Stoll (2008) and Brown (2013) to identify the roots of the PoliLCs concept in other more developed theoretical areas, and to build upon these. This led me to explore alternative models for collaborative learning to guide my investigation into the concept of PoliLCs. The investigation allowed this study to identify an appropriate method to explore the concept, build a framework to support analysis, and develop a theoretical framework to engage in deep discussion.

Yet, the lack of previous research contributed to the presence of another limitation, which is the broad aim of this study. This study engaged in not only an empirical investigation of collaborative learning in policymaking, but the theoretical and philosophical development of the concept of PoliLCs. By doing so, the study risked a broad aim where a large portion of the work focused on concept development. This limitation has impacted choices of sampling, findings, and analysis. In regards to sampling, only one policy community in the UAE was explored as I sought in-depth descriptions of its practice to assist in the conceptual development of PoliLCs, rather than a multi-case approach to identify patterns. At this point of the PoliLCs' concept development, I identified the need to develop the concept further theoretically to build a ground for future

research that is then able to explore the concept in multiple contexts, which justifies the sample choice. The impact of the broad aim limitation on findings and analysis meant that I did not seek in my data collection methods to explore specific variables of PoliLCs in-depth, such as the role of trust, group dynamics, or mental-modes. Instead, the findings provided a broader understanding of interaction and learning in policy communities within the framework created on PoliLCs, and an empirical application of the framework to guide future research.

A limitation in regards to the methodology used in this study is related to the reliability of self-reported data in the questionnaire and in-depth interviews. The SNA questionnaire collected data on actor interaction in which each actor was asked to report on his or her interaction with other actors. In the questionnaire I provided a name list of all network actors to avoid the issue of actors not recalling names of people they interacted with. In SNA, data are collected at one point in time and the information risks reliability if changes occur. To address this limitation within my study, I chose to only use the SNA survey data to collect demographic information on participants, and provide a visual map of community member interactions. The in-depth interviews with multiple community actors were then utilised to provide deeper understandings of the practices of the policy community, its structure, interactions, and learning. To address reliability challenges of the in-depth interviews, an approach to triangulating data sources was applied. Varying participants within the community allowed data source triangulation to be possible, where the interviewed participants were policymakers, external experts, and practitioners.

6.4 Suggestions for further research

My attempt to support the conceptualisation of PoliLCs theoretically and empirically remains a limited attempt in scope. More research is needed to examine the theoretical framework and model this study has developed to

explore PoliLCs, both in terms of a new context of education policymaking in other locations, or a re-evaluation of the framework. In terms of testing the theoretical model in a new context, future studies can look at different locations such as countries in the West, within which the concept of PoliLCs was initially discussed, to bring about a different understanding of the concept.

The groundwork for the concept of PoliLCs I have developed here is an effort to claim the concept as an individual area for research, which then can potentially allow future researchers to take the concept further and develop it into its own body of research in policy literature. More research is needed to explore the concept through examining variables of PoliLCs more fully, and adding variables to the framework. An example of this future research examining variables more closely may be the exploration of concepts such as capacity, trust, and group-dynamics in relation to how they impact learning and knowledge utilisation in PoliLCs. In addition, future research can explore using different methodologies in investigating PoliLCs beyond my use of in-depth interviews and an SNA survey.

Another possible future research for the concept of PoliLCs away from theoretical grounding is practical action research, wherein research could identify tools that can support the creation or facilitation of PoliLCs within existing policy communities. These tools or guides can be practical attempts to gauge the interest of policy actors in the model of PoliLCs, and support them in making their existing policy communities more of learning communities in policymaking.

The knowledge and findings of this study provide contributions within, and outside, academia. Within academia, the findings contribute to the exploration of the concept of learning communities in policy settings. In addition, this research contributes by offering a framework for the exploration of PoliLCs

using the SNA methodological approach. Beyond academia, this study presents potential impact to the practice of decision makers in policy settings. In particular, the model introduces ways by which policymakers can engage in individual learning by interacting with various actors in their decision-making processes.

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8 Appendix

8.1 Interview questions

A. Description of learning community

- 1) Can you describe to me what is the Arabic language curriculum policy community? Who is involved?
- 2) What is the shared purpose of the policy community?
- 3) How does the community members interact and communicate with one another?
- 4) What forms of communication in your opinion is most useful for interacting with other community members?

B. Description of interaction

- 5) What factors motivates you to interact more frequently with other community members?
- 6) What makes you choose to interact more frequently with certain community members than others?
- 7) What factors limit your interactions with other community members?

C. Description of learning

- 8) Describe to me the learning experience that occurs between community members?
- 9) What factors encourage you to seek learning and information from other community actors?
- 10) What is the role of learning of learning in policymaking process of the community?
- 11) What learning resources are available to community members? Which are used more frequently?

D. Description of evidence and research utilisation

- 12) What role does research and evidence play in the decision-making process of the policy community?
- 13) What factors encourage you to use research and evidence
- 14) What barriers and obstacles face the uptake of research and evidence in decision-making process of the community?
- 15) What individual and organizational factors can motivate an increase in the use of research and evidence in the policy community decision-making.

8.2 SNA questionnaire

The survey will take an average of 25 minutes to complete. Your responses will be held in the strictest of confidence with only the researcher having access to the database. We will share the results WITHOUT any individual being personally identified so we can benefit from the knowledge.

Identification:

Name:

Job title:

I am primarily housed at..

- The Ministry of Education
- Other (please indicate): _____

How many years have you been..

- In your current position
- In Arabic language curriculum development
- In curriculum policymaking
- An educator in any position

Professional Network

The next series of questions will ask you to reflect on different aspects of your professional interactions when working with other professionals related to Arabic language curriculum development and policymaking. We provide a list of all curriculum department employees as well as members of the different committees and teams formed in these departments internally or externally that are involved in Arabic language curriculum.

Some of these individuals you may interact with frequently, and others you may not interact with very much. Please respond for every person you have

interacted with- you do not need to respond for those you do not engage with. For example if there are multiple people with whom you interact with for each category then check multiple names.

1) Over the last year, please identify from the list of names whom you regard as a reliable source of expertise related to your work in terms of Arabic curriculum development and policymaking

2) Over the last year, please identify from the list of names whom you regard you have sought research based advice from them to improve your decision making or curriculum development practice

3) Over the last year, please identify from the list of names whom you have sought general advice from them to improve your decision making or curriculum development practice

4) Thinking about the last couple of months until now, with who have you..

- a) Exchanged curriculum learning materials (e.g. curriculum maps)
- b) Jointly inquired to research and evaluate current Arabic language curriculum and policies (e.g. conducted research based searches)
- c) Collaborated regarding improving Arabic language curriculum and policy (e.g. engaged in current curriculum and policy evaluation)

8.3 Consent form

Before agreeing to participate in this research, we encourage you to read the following explanation of this study. This letter will outline the purpose of this research, questions to expect, and the procedure of the study.

Purpose of research

The aim of this research is to conceptualise and understand the concept of PoliLCs by exploring the learning and interaction practices of the Arabic

Language Curriculum policy community. The study is mostly interested in exploring the actors who are involved in these networks, the learning and cooperation that takes place, and the transfer of knowledge within these networks. The research will be used to provide an illustrative case study a policy community case to support to conceptualization of PoliLCs.

Explanation of Procedures

The study adopts a Social Network Analysis (SNA) approach. The method – survey or interview- used explores the following two areas: the individuals involved, and the relationship or interactions that connect them. If you chose to participate in this study, you will be given a questionnaire that will require you to name the individuals you interact and learn from when developing policy, and the extent of your interaction. The questionnaire is estimated to take 30-40 minutes of your time and can be conducted online or face-to-face by the researcher at the preference of the participant.

Confidentiality

The nature of the SNA approach requires participants to identify themselves when participating in the study, and name the individuals they interact with. As a result, it is impossible in the data collection phase that participants remain anonymous or that nicknames are used when naming individuals. However, this is strictly for data gathering purposes; participant names will not be used when reporting data and will be replaced with job title if preferred. The information gathered during this study will remain confidential in secure premises. Digital files will be stored with a passcode on my laptop, and physical paper files will be locked in a cabinet.

Please indicate if you have a preference to how you want to be mentioned in the published documents (e.g. by title or job description):

Withdrawal

Participating in this study is voluntary, and participants can withdraw at any time without prejudice or penalty.

Further question

For any questions or inquires about this study please contact me at



I, _____ (name), have read the above information and agree to participate in this study. I understand that I am free to refuse to answer any questions and can withdraw at any time.

Participant Signature

Date

Check those that apply:

I would like a copy of my answers

I would like information about the study result

I would be willing to be contacted in the future for follow up interview