

Organisational Learning in a Fusion School

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Master's Thesis in Education
Spring Term 2016
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ABSTRACT

Laiho-Murdoch, Heli. 2016. Organisational learning in a Fusion School University of Jyväskylä. Department of Education.

This empirical research examines organisational learning in a fusion-school development during the period of 2010 and 2012 by a case study approach of the phenomenon. This educational fusion is between two diverse countries; Finland and the United Arab Emirates. The background is Abu Dhabi's education reform since 2003 and the Finnish outstanding educational experience and excellent PISA results. The originality value of this research is unique. This partnership is first of its kind in Finland, and has therefore notable interest value. Organisational learning manifesting in this type of education partnership fusion has not been researched before and to my true knowledge has not been reported elsewhere, so this study is significant.

I was immersed into the empirical social-world of the process and the life as a participant observer. I chose five applicable theories that enable me to explain the organisational learning in school environments, open up organisational learning concepts via literature and examine the organisational learning in the fusion school. In the light of these theories I proceed to a deductive qualitative analysis of the phenomenon. Data was collected in team meetings, innovation workshops, staff meetings, in informal and semi-structured teacher interviews, teacher observations, and collegial discussions over two years.

As organisational learning promote detection and correction of error and help avoiding behaviours that preserve status quo permitting proactive learning, embedding new knowledge, enabling school systems to renew or transform and balance continuity and change (Collinson & Cook, 2007, p. 45) this research will support the fusion regeneration process. The data reveals areas of professional development need to ensure organisational learning growth.

Keywords: organisational learning, learning organisation, community of learners, professional development, single-loop and double-loop learning, strategic learning cycle.

Acronyms:

Abu Dhabi Education Council = ADEC

United Arab Emirates = UAE

ECF = ECF

Ministry of Education of UAE = (MoE)

New School Model = NSM

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Acknowledgements

I am profoundly indebted to a great number of people who have made this research possible. First, the University of Jyväskylä Institute of Educational Leadership staff for their consistent support, advice and especially Dr. Pekka Kanervio for his guidance; Abu Dhabi Education Council Head Quarters for consenting to the EPA-Emirati-Finnish fusion research; ADEC P12 Curriculum Team's edifying dialogue during those years and EduClusterFinland for facilitating such a rare opportunity to research a phenomena that is educationally unique and inspiring.

Next, I want to offer my sincere gratitude to all my EPA-project colleagues and Curriculum Team members, who from the start offered full support, curricular teamwork and were in full agreement for this case study; my school and our lovely Emirati sisters, teachers, who relentlessly spent long hours in reflection and study joining in the co-operative dialogue and who also helped us Finns to settle in and feel at home in the magical Arabic land of the United Arab Emirates and finally our lively and beautiful Emirati students.

Lastly, I would like to thank my wonderful family. Our eldest son, Michael, has encouraged me academically through his professionalism while completing his PhD. Nisse, our middle son, has helped immensely with his exceptional altruism in looking after the family and Aku, the dog, from 2010-2014. Matti, our youngest, has provided me with support and patiently stood by me, as I completed my studies. Finally, the numerous family and friends around the world, who have made this study possible; I sincerely thank you all.

1 INTRODUCTION

The case study below examines the organisational learning in an Emirati-Finnish fusion-school curriculum development during the period of 2010 and 2012. This pedagogic fusion is between two culturally, educationally and pedagogically diverse countries, Finland and United Arab Emirates. The Abu Dhabi Education Council, (later ADEC) and EduClusterFinland Ltd (later ECF), their education partner, (later EPA), are creating the first pedagogical fusion of Abu Dhabi and Finnish experience, leading to the creation of world-class flagship schools in the cities of Abu Dhabi and Al Ain. The ECF CEO sees it “as a process that requires designing and testing the introduction of a classroom teaching model within the new ADEC New School Model (later NSM) curriculum. It serves to establish new pedagogical knowledge which closely fits the new ADEC NSM curriculum and which enables Abu Dhabi teachers to develop teaching and learning through a Finnish class teacher model. The EPA will ensure early consolidation of experience and expertise leading to the potential for both cascade and sustainability.” (ECF, 2010.)

My role over the two years was to lead the school’s curricular fusion adaptation and implementation processes, to teach and model best practice in classroom teaching, to mentor local teachers, offer SEN support for student and offer support in administrative meetings and operational processes. I was inside as an observer participant. This study concentrates on organisational learning in curriculum development area, however, I have observed organisational learning in its broader-spectrum in the fusion school. It is apparent that in an education partnership learning will inevitably take place; new curriculum is acquainted,

policies are updated or changed, administrators and faculty come and go all bringing in new thoughts and new ways of operating. By working together, sharing expectations, adapting and trying new ideas the organisational members learn. (Collinson & Cook, 2007, p. 15.) Nonetheless, not all learning can be defined as organisational learning - organisational learning is more of a considered process. It involves organisational members actively addressing problems and issues instead of automatically accepting the obvious or already tested solutions. The disciplines which are at the heart of organisational learning in general are discovering incorrect expectations, questioning existing ways of operating, learning from mistakes and ensuring useful ideas and innovations spread beyond individual members. (Collinson & Cook, 2007, p. 15.) Many people in the organisation can learn, but their individual knowledge may not necessarily spread across the organisation. (Collinson & Cook, 2007, p. 45.) The concept of learning makes learning concerns into matters of organisational design, raised from relegation as a secondary function to being the central organisational principle. (Wenger, 1998, p. 249.)

The educational context of the United Arab Emirates is very interesting. To comprehend the disparity of the educational culture between these two partnering countries we must understand the background and the speed of the United Arab Emirates basic education reform, contrasted to current Finnish basic education, which has been developing through reforms since 1929. The purpose is not to juxtapose these two, but to give the reader an understanding of the challenges that present themselves in an educational partnership like this.

The United Arab Emirates is an exclusive setting for an educational reform. Since the discovery of oil revenues in 1959 wealth has slowly poured in to the country making it finally possible for the UAE to improve its financial structure, infrastructure and education. The ruler and founder of the United Arab Emirates, HH Sheikh Zayed Bin Sultan Al-Nahyan, made education a priority in the country's development in 1972; before that there was a gap in formal national education system. (Al Fahim, 1995.) As late as in November 2004 the current leader's brother Sheikh Nahyan Bin Mubarak Al-Nahyan took responsibility for both the education portfolios of the K-12 and higher education in the UAE. Soon after his ministerial

appointment, he announced a restructuring of the K-12 school system with primarily targeted teaching methods and assessment procedures. Education in government schools was controlled by the Ministry of Education. His goal was to have an educationally sound country by the year 2030. (ADEC, 2009.) In 2008 the New School Model National curriculum begun to gain momentum across the ADEC schools and the implications are that by 2015 it should have been fully implemented across the education sector. (ADEC, 2009.) According to ADEC (2009) Strategic Plan for P-12 Education (2009-2018) the Long-Term Strategy for ADEC is to pursue a long-arching strategy to achieve dramatic quality improvements in the bi-lingual, Arabic-English, P-12 education. The reform will address every component of the education system. The Finnish EPA-project is a small component part of this mammoth reform, and meant to give ADEC the added advantage of studying the Finnish pedagogic elements in addition to bringing some of this knowledge to the national educational practices. This intrinsic case study takes place inside one of these Emirati-Finnish fusion schools, and focuses on the organisational learning that is manifesting in the fusion school, especially within curriculum development.

1.1 Context

The United Arab Emirates is, educationally, a state mandated country. Since the education reform began in earnest in the turn of the new Millennium, all instruction to schools and their teaching staff regarding the curricular content and outcomes came from the Ministry of Education of UAE (MoE). In 2003 the education council, ADEC, was established in the emirate of Abu Dhabi to enhance, organise and lead the education in the emirate of Abu Dhabi. (ADEC, 2009.) The context of this study is one of the two Emirati- Finnish Cycle 1 schools; the Girl's school. The student cohort doubled from 290 students on roll in 2010 to 600 pupils on roll in two years of the onset.

The fusion school is under Abu Dhabi Education Council (ADEC) authority and operates in the city of Al Ain in the Abu Dhabi emirate of United Arab Emirates

(UAE), as part of the Education Partnership project (EPA) (ECF 2010) initiative with ADEC and the University of Jyväskylä. EPA is a five year long, 2010-2015, educational partnership programme between ADEC and ECF, a new generation expert organisation specialising in education and development in aiming to develop an Emirati-Finnish fusion environment for two Cycle 1 schools in Abu Dhabi (boys) and in Al Ain. (ECF, 2010.) Both fusion schools have professional onsite assistance provided by ECF as part of the University of Jyväskylä group.

The project set out to develop a class teacher model by which to nurture child-focused learning; "to create inclusive learner-centred environments; to employ integrated technologies for teaching and learning; to foster school, home and community stakeholder relationships; to maximise access to learning for children with differing abilities; and to embed language-supportive techniques in subject learning taught through English in the Emirate of Abu Dhabi." (ECF, 2010.) The EPA-project focuses on the running of the school-level operations in these two flagship schools. Finnish and Emirati educators work jointly to facilitate the development of the schools through the Abu Dhabi education authorities.

The core area in this on-going case study is the school based fusion curricular development and the organisational learning it entails. (ECF, 2010). Culturally, linguistically and religiously these two countries are miles apart. However, what unites these teachers and education administrators in both countries is the keen interest in education and education reform that is permanent and long lasting.

1.2 Literature

The literature and theories available under organisational learning is numerous, so I have chosen six applicable theories that enable us to explain the phenomena of organisational learning in organisations, such as schools, and which are in the center of the curriculum development process in the Emirati-Finnish case study fusion school; Argyris and Schön's (1974) theory-in-action and single-loop and double-loop learning; experiential learning style theory by Kolb, (1976); the model of

organisations as interpretation systems by Daft and Weick (1984); systems thinking by Senge (1990); strategic learning cycle by Pietersen (2000) and the use of individual, group and system learning by Collinson and Cook (2007).

All of these theories have a part to play in analysing the organisational learning in the fusion school curriculum development and they all contribute in the findings. They “include the general properties that all theories share and general criteria applied to them: generality, centrality and simplicity”. (Argyris & Schön 1974, p. 30.) In schools and school systems theory offers a way for educators to evaluate individual practical strategies and pull them together into a more systemic picture of deliberate learning. Understanding theoretical background can help individuals, groups and organisations stay focused on the bigger picture. (Collinson & Cook, 2007, p. 17.)

1.3 Purpose and Significance of the Study

The intention of this study is to find out what are the expectations held in the school in relation to organisational learning, how the organisational learning presents itself, and the importance of the fusion curricula in relation to organisational learning. When researching learning in a school, the focus is on the development of the curricula, as curriculum is at the heart of each school, it states the school’s ethos, vision and mission, it clarifies educational principles, explains the pedagogic methods of teaching and the expectations on student learning in any particular school. (McKernan, 1991.) Curriculum is a mechanism through which schools develop dynamic capabilities defined as routine activities directed to the development and adaptation of operating routines. (Easterby-Smith & Lyles, 2003, p. 601.) Zollo and Winter (2002, pp. 339-44) and Easterby-Smith and Lyles (2003, p. 601) argue that dynamic capabilities are shaped by the co-evolution of learning mechanism; such as experience build-up, knowledge delivery, and knowledge systematisation in dynamic evolution process. These processes are evident in the adaptation, development and implementation of curricula and in the curricular

knowledge transfer processes. I chose to study the curricular development process deeper to show the organisational learning elements present and also to highlight possible areas for improvement for true organisational learning to happen.

My intention in this study also is to deepen the understanding of organisational learning among the stakeholders and the teachers' understanding and participation in the fusion school central affairs and how they may increase this knowledge. This case study is conscientiously based on ADEC values and beliefs and directly emphasises the role of the school and the individual as core elements in the educational development. The purpose has been to gather comprehensive, systematic and in-depth information about organisational learning (Patton, 2002, p. 447) in the curricular development process. Most importantly, this study provides important information and data for anyone who is profoundly interested in organisational learning in educational fusion processes. It will also assist the fusion school's further development to assume direction for the best possible outcome. This case study is unique and hence has a notable research value.

1.4 Methods

This study is a qualitative single case study; qualitative research data, holistic deductive design of naturalistic inquiry and case analysis is applied (Patton, 2002, p. 248) to illustrate theoretically and as an ongoing empirical study over two years in the Emirati-Finnish educational fusion school how organisational learning manifests in the fusion school's curricular development. I chose the qualitative research method as this study is based on an ongoing case study with myself as an active participant immersed in the process and deductive analysis against certain organisational theories.

The data collection began in September 2010 and ended in July 2012. The research objective has been to collect first hand multiple-source data through continuous dialogue and discourse within the teaching, administration and peripatetic staff of the school, along with informal and semi-structured interviews,

observations, audio recordings, documents, memos and other ethno-historical account of categories. (Patton, 2002, p. 583.)

The case selection method is purposeful sampling (Patton, 2002, p. 40) of the members of the school past and present that have been directly involved in the fusion development process in this school. No participants are named in this research paper, all information is strictly confidential and interviews were anonymous. The school is referred to as an Emirati-Finnish fusion school, or 'the fusion school' in the data and in this thesis. No children were directly involved in this study as emphasis is on adult learning in the organisation. The fundamental approach was an honest routine with continuing attention to detail that maximised the benefits and avoided costs that was the central part of this research. (Fowler, 2009, p. 168.)

2 REVIEW OF LITERATURE

The four major research questions in this thesis are: What is the nature of organisational learning and learning organisations as conveyed by the literature and in this schools setting? What are the expectations held in this School in relation to organisational learning? How does the organisational learning manifest in the school's curriculum development? What is the importance of the curriculum in relation to organisational learning?

The literature focuses on several distinguished theories of organisational learning. I chose these theories to provide the orienting framework for this case study and to share light to these research questions. *Organisational learning* is seen as the deliberate use of individual, group and system learning to embed new thinking and practices, that constantly renew and transform the organisation in ways that support shared aims. (Collinson & Cook, 2007, p. 8.)

Learning organisations are organisations where people continually increase their capacity to create the results they truly desire, where new and extensive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. (Senge, 1990, p. 3.) *Community of learners* refers to community members' ability to learn and to be receptive to learning within an organisation depending on the level of learning of colleagues around them. This kind of interdependence is reciprocal, community orientated learning. (Collinson & Cook, 2007, p. 179.) *Team dynamics* denotes to the manner in which groups of people work and learn together and *professional development* generally refers to practitioners' improvement of their own professional knowledge and skills. (Collinson & Cook, 2007, p. 68.)

Single-loop learning entails behavioural change; while actions change, existing norms remain unchanged. Single-loop learning generally involves becoming better at something that is already being done. (Argyris & Schön, 1978, pp. 2-3; Collinson & Cook, 2007, p. 19.) *Double-loop learning* on the other hand refers to behavioural

change resulting from cognitive change; it changes organisational frames of reference (norms). This takes place when members examine the mismatch between the espoused theory-in-action and their theory-in-use, and then take action to resolve the mismatch. (Argyris & Schön, 1978, pp. 2-3; Collinson & Cook, 2007, p. 20.) *Deuterolearning* happens when organisation is seeking to learn by improving both single- and double-loop learning. Deuterolearning is learning about improving the learning system itself by reflection. (Argyris & Schön, 1978, pp. 20-21; 1996.) Essentially deuterolearning is *learning how to learn* which is related to Senge's concept of the learning organisation, in specific with regards to improving learning processes and understanding and adapting mental models. In effective learning all three are continuously improving the organisation at all levels.

2.1 Synthesis of Findings from Research Studies on Organisational Learning

The major theories included in the theoretical framework of this Master's Thesis are important in establishing links between theory and practice in innovative educational partnerships and education reforms, such as in the case study of this fusion school. These theories agree, that the core in any organisational learning is seeking to understand the society, to develop the skills required to influence social change and to renew and transform organisations to support shared goals, and that this is linked very closely on experience and reflection. They agree that leadership actions carry the torch for organisational learning within an organisation; they share the view that organisational learning involves action, reflection and renewal and they agree to collaboration and sharing knowledge being the key to organisational learning.

Argyris and Schön (1974, p. 6-7, 30; 1978, pp. 2 - 21; 1996, p. xix, Argyris, 1999, p. xiii) claim that individuals collectively, via inquiry, detect errors and aim to correct them. An *error* is seen as a mismatch (discrepancy) between plan, or

intention and what actually happened when either is implemented. (Argyris and Schön, 1978, pp. 2-3.) In schools the discrepancy between intention and outcome usually creates new learning, for example in planning the discrepancy in outcome directs future planning and possible further actions, which themselves create wider organisational learning. In a theory of Action Perspective, the authors give an explanation of the theory-in-action, espoused-theory-in-action, single-loop learning, double-loop and deuterolearning frameworks, that define manners of organisational learning and the methods how to achieve the best in terms of behavioural and cognitive change. (Argyris & Schön, 1978, pp. 2 - 21.)

Experiential Learning Model (ELM) theory (Kolb & Fry, 1975, p. 4) reflects stalwartly on individual and group experiences, and learning-from-doing. This theory and practice explains those processes associated with making sense of experiences and the learning styles involved, and is used widely on adult education, informal education and lifelong learning. The authors argue that the learning cycle can begin at any one of the four points – *concrete experience, observation and reflection, forming abstract concepts, and testing the new situation*, (Kolb 1976, pp. 21-31) and that it should really be approached as a continuous spiral. However, the learning process may also begin at any of these stages with a person carrying out a particular action and then seeing the effects of the action in this situation. Here we refer to new learning that one member of learning organisation has adopted and then shares it within the rest of the organisation. This theory has a learner centred approach where people learn-by-doing, and has a holistic approach of addressing cognitive, emotional and the physical aspect of the learner. (Collinson & Cook, 2007, p. 49.) In the experiential learning model the *educator* (teacher, coach or mentor) is in essence the *facilitator* of a person's learning cycle. Educator is the person, who helps individuals to reflect upon the theories-in-action. (Argyris and Schön, 1975, pp.16-17.) Like Argyris and Schön's (1975) theory of Action Perspective, Experiential Learning Model theory also relies on critical reflection from experience.

Toward a Model of Organisations as Interpretation Systems theory (Daft & Weick, 1984, pp. 285 - 293) is a theoretical view of organisational learning as a comparative model of organisations as interpretation systems. It views the

organisation as whole and individuals as parts of the organisational whole which interprets the environment and the information in it. A distinctive feature of organisation level information activity is sharing - a piece of data, a perception, and cognitive map is shared among the people who create the interpretation system. (Daft & Weick, 1984, p. 285.) The model describes four interpretation modes: *enacting, discovering, undirected viewing and conditional viewing*. The interconnectedness and influence of the interpreting system toward other organisational components are also discussed. The model is based on four assumptions: organisations are open systems and must interpret the environments complexity in order to survive; individuals process the information and not the organisation; both the individuals and organisation have different interpretation systems and managers formulate the organisation's interpretation; organisations differ systematically in the way they interpret information. The authors further propose a process that encompasses a feedback loop of scanning (data collection), interpreting (giving meaning to data) and learning (taking action). (Daft and Weick (1984, p. 285.) This theory is somewhat more complicated regarding organisational learning than the other ones included as it was developed for an industry, however, this theory joins in with the others in explaining the main characteristic actions an organisation must take in order for organisational learning to take place.

According to the theory of *systems thinking* (Senge, 1990, p. 3) learning organisations are organisations, where people continually expand their capacity to create the results they actually desire, where new and broad patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. The basic rationale for such organisations is that in situations of rapid change only those that are flexible, adaptive and productive will excel, and in order to understand the relations between organisation and the environment we need systems thinking (Senge, 1990, p. 14). The systems thinking theory of practice links the individual learning to the real work environment. This is important for the implementation of organisational learning in any setting. Systemic thinking and those dimensions that distinguish

learning organisations from more traditional organisations such as survival learning, adaptive learning, generative learning, and component technologies (Senge, 1990, p. 14) follow the mastery of certain basic disciplines; *personal mastery, mental models, building shared vision, team learning and systems thinking*. (Senge, 1990, p. 3.) Furthermore, decision making in organisations can be impacted by the system's method to interpreting the data. Observing these five basic disciplines similarities can be distinguished to the Model of Organisations as Interpretation Systems theory (Daft & Weick, 1984, pp. 285 - 293).

The theory of Strategic Learning cycle (Pietersen, 2002, p. 9) explores reinvention of strategic learning in organisational learning through a cycle of four repetitive steps - *learn, focus, align and execute*, that will provide executives and leaders in any organisation a set of 'tools' to turn innovative ideas into actions and thus fuel organisational learning. According to Pietersen (2002, p. 11) strategic learning must be inbuilt into the organisation and strategic innovation is considered more important than "random actions and ad hoc initiatives". It must be the central core of operational principles and offer systemic support in practical leadership processes. Organisational learning always involves repetitions and reconsiderations so the cycle is to be used as a useful learning cycle as long as each step is used in the cyclical process. (Pietersen, 2002 p.11.) This theory shares Senge's (1990, p. 14) systemic thinking view of organisations where people continually expand their capacity to create results, where new patterns of thinking are nurtured, and where people are continually learning to see the whole together.

More recent theory on Organisational Learning: Improving Learning, Teaching, and Leading in School Systems, (Collinson & Cook, 2007, pp. 129 - 210) provides us with an insight and practical tools into what is organisational learning and how to foster it in schools. The authors share the view of the previous authors, that organisational learning is deeply involved in individual learning and the sharing of this knowledge and skills in the workplace. They stress that the ambience and environment in the work place is the one that determines how successful organisational learning will be in that organisation and that organisational learning is more a deliberate process that involves organisational members actively

addressing problems and issues rather than automatically accepting obvious or tested solutions; it relies on discovering wrong assumptions, questioning existing ways of operating, learning from mistakes, and ensuring that useful ideas and innovations spread beyond individual members. (Collinson & Cook, 2007, p. 15.)

2.2. Theoretical framework

In this chapter I shall position a more detailed overview of central theories in organisational learning which explain the phenomena of organisational learning in the fusion school's curriculum development. Curriculum is in the centre of a school; it guides the learning processes and hence it entails that the curriculum development process encompasses all learning taking place in the school. These theories have many assumptions about organisational learning in common, but not one that we can pin-point and say that this particular theory covers all of the organisational learning in this research. Moreover, they share the same steps to promote organisational learning in a school, they provide useful insights on where to base strategic thinking, they offer practical solutions that the schools leadership can use to foster organisational learning environment. Organisational learning is unceasingly evolving within its' environment and there will be new developments - in technology, but by itself, technology is not what will advance learning. There will be important research discoveries about how people learn, but by themselves, they will not revolutionize organisational learning strategies. (Brandon, 2015)

2.2.1 Theories-in-use, Single- and Double-loop learning.

Argyris and Schön's (1978) research was based around the individual and organisational learning. Their argument is that people have *mental maps* that guide their actions in situations involving planning, implementation and reviewing their actions and that these maps guide peoples' actions rather than the theories they explicitly espouse (promote). (Argyris & Schön, 1974.) In other words, the theory

and action are split in to two. Argyris and Schön (1978) linked inquiry with error detection and correction – simplified: individuals collectively, via inquiry, detect errors and aim to correct them. The authors further developed the *espoused-theories-of-action, theories-in-use and single- and double-loop learning*.

'Theory-in-use' is what we actually *do*. In individual level it means that what you believe is reflected in what you do and organisational level assumptions are reflected in what decisions are made and what actions are taken within the organisation. Theory-in-use in the context of organisational learning happens when the error detected and corrected permits the organisation to carry on its present policies or achieve its present objectives. That error-and-correction process is single-loop learning. Single-loop learning is like a thermostat that learns when it is too hot or too cold and turns the heat on or off. The thermostat can perform this task because it can receive information (the temperature of the room) and take corrective action. Double-loop learning on the other hand occurs when error is detected and corrected in ways that involve the modification of an organisation's underlying norms, policies and objectives. (Argyris & Schön 1978, pp. 2-3.)

An espoused theory is what we *say* we do. Espoused theories of action reflect an organisation's ideology and philosophy. For example, let's take a concrete and often discussed element from a school. In the organisation (school) the communication is inefficient due to authoritarian hierarchy within the administration. Information does not pass on smoothly from the principal to the recipients, but often is left somewhere in the administrative power struggle and hence is delayed or missing altogether from the recipients. The school views itself as collaborative and transparent organisation in actions, but the real truth is that it is not. It is still confined to the old rigid ways of authoritative hierarchical administrative communication transmission where errors are hidden or covered up. This is an example of espoused theory of action. When someone is asked how he would behave in under certain circumstances the answer usually given is *espoused-theory-of-action* for that situation. This is the theory of action to which he is loyal, and which when asked, he communicates to others, but the actual theory that rules his actions is theory-in-use. (Argyris & Schön 1974, pp. 6-7.)

Theories-in-use reflect organisational assumptions and understandings that are shared among members and are reflected in individual and organisational actions. Effectiveness results from the correspondence in between theory-in -use and espoused theory, a positive element, a certain space in between these theories; if they remain connected it gives room for dialogue and self-reflection. Human actions are always intended to achieve certain consequences and are governed by a set of environmental variables. The manner we guide these governing variables in planning our actions are the key differences between single- loop learning and double-loop learning. (Argyris & Schön, 1978, p. 21.)

When our actions are intended to achieve certain consequences and to avoid conflict about the governing variables, a single- loop learning cycle most commonly prevails. However, if we take action to achieve certain consequences, but we also openly challenge the conflict and inquire and hence change the governing variables, both single-loop and double-loop learning cycles prevail. This applies also to organisational behaviours. In the studied fusion school the staff seems to be leaning towards single-looped solutions as they are easier and immediate. However, as we see later in the study, clear indicators of double looped learning solutions such as critical reflection develop slowly in the fusion schools organisational practises. These are very much dependent on the organisational leadership and how it facilitates these practices. Double-loop learning is necessary if practitioners and organisations are to make informed decisions in rapidly changing and often uncertain contexts. (Argyris & Schön, 1974, 1978, 1996.)

The follow up for double-loop learning are the two models (illustrated in table 1 and table 2) that define the features of theories-in-use that either inhibit or enhance double-loop learning and block organisational learning. (Argyris & Schön, 1996, p. xiii-xiv.) The belief is that all people utilise a common-theory-in-use in problematic situations. Model I illustrates how single-loop learning affects human actions. Individuals using the Model I, the common-theory-in-use in problematic situations, usually act defensively, self-fulfilling prophecies, self-fuelling processes and increasing error. (Argyris, 1982, p. 8.)

TABLE 1 Model I (Argyris, Putnam & Smith, 1985.)

Governing Variables	Action Strategies	Consequences for the Behavioural World	Consequences for Learning	Effectiveness
Define goals and try to achieve them	Design and manage the environment unilaterally (be persuasive, appeal to larger goals)	Actor seen as defensive, inconsistent, incongruent, competitive, controlling, fearful of being vulnerable, manipulative, withholding of feelings, overly concerned about self and others or under concerned about others	Self-sealing	Decreased effectiveness
Maximize winning and minimize losing	Own and control the task (claim ownership of the task, be guardian of definition and execution of task)	Defensive interpersonal and group relationship (dependence upon actor, little addiction little helping of others)	Single-loop learning	
Minimize generating or expressing negative feelings	Unilaterally protect yourself (speak with inferred categories accompanied by little or no directly observable behaviour, be blind to impact on others and to the incongruity between rhetoric and behaviour, reduce incongruity by defensive actions such as blaming, stereotyping, suppressing feelings, intellectualizing)	Defensive norms (mistrust, lack of risk taking, conformity, emphasis on diplomacy, power-centred competition, and rivalry)	Little testing of theories publicly, much testing of theories privately	
Be rational	Unilaterally protect others from being hurt (withhold information, create rules to censor information and behaviour, hold private meetings)	Little freedom of choice, internal commitment, or risk taking		

These are actions which act as inhibitors to detecting and correcting error. If there are many individuals in an organisation that make use of Model I learning the organisation will begin to act against its own long term interests. In the recruiting stages in the fusion environment it seemed to be essential for the education providers, ECF, to ensure that the organisational staff was made up from many diverse education experts to prevent it from happening. To advance from this situation the aim is then to move on to Model II learning which enforces deeper organisational learning and thinking. In Model II the governing values associated with theories-in-use enhance double- loop learning.

TABLE 2, Model II (Argyris, Putnam & Smith, 1985.)

Governing Variables	Action Strategies	Consequences for the Behavioural World	Consequences for Learning	Consequences for Quality of Life
Valid information	Design situations or environments where participants can be origins and can experience high personal causation (psychological success, confirmation, essentiality)	Actor experienced as minimally defensive (facilitator, collaborator, choice creator)	Dis-confirmable processes	Quality of life will be more positive than negative (high authenticity and high freedom of choice)
Free and informed choice	tasks are controlled jointly	Minimally defensive interpersonal relations and group dynamics	Double-loop learning	Effectiveness of problem solving and decision making will be great, especially for difficult problems
Internal commitment to the choice and constant monitoring of its implementation	Protection of self is a joint enterprise and oriented toward growth (speak in directly observable categories, seek to reduce blindness about own inconsistency and incongruity)	Learning-oriented norms (trust, individuality, open confrontation on difficult issues)	Public testing of theories	
	Bilateral protection of others			

In Model II the direct consequence of our actions to learning and to the quality of life is evident. The free choices and joint tasks reinforce organisational learning. Model II is dialogical and it will flourish within a shared collaborative leadership in any systems organisation. Argyris & Schön, (1996, p. xix) argue that “depending on the organisations ability to see things in new ways, gain new understandings and produce new patterns of behaviour - all on a continuing basis and in a way that engages the organisation as a whole” leads to organisation’s success. Strategically constantly monitoring Model II implementation and action designs situations or environments where participants can experience high personal connection. It functions by minimally protective interpersonal relations, team dynamics and learning-oriented norms (trust, individuality, open confrontation on difficult issues). In consequence it entails high freedom of choice and increased likelihood of double-loop learning. (Argyris et al. 1985) According to Argyris and Schön (1978,

pp. 16-17) "Organisational theory-in-use, continually constructed through individual inquiry, is encoded in private images and in public maps. These are the media of organisational learning."

This theory is possible in an organisation where all employees are either robots or extremely trained in concentrating only on the positive organisational outcome. In schools teachers and other individuals are very human. We all have our particular traits of behaviour and no matter how professional we are there are times when personalities may clash and jeopardise the learning outcome that we are aiming for. However, Argyris and Schön's (1974, 1978) theories-in-action have far reaching implications to organisational learning theories and is definitely useful as critically reflective tool in any organisation building clear operational strategies in organisational learning and determining the phase of their organisational evolution.

2.2.2 Experiential Learning Model (ELM) theory

Kolb and Fry's (1975, p. 41) model of Experiential Learning is often linked to the theory and practice of adult education, informal education and lifelong learning. Kolb and Fry were interested in the nature, the individual and social change, experiential learning and professional education. His work has its base on the works of Piaget and Dewey. He explored processes associated with making sense of experiences and the learning styles involved. It is included to clarify certain aspects that shed light to the learning cycle and the role of experiences and reflection, including various learning styles that learners may adopt. Experiential Learning Model (ELM) theory sees "learning as the process whereby knowledge is created through the transformation of experience" (Kolb & Fry, 1975, p. 41) which is illustrated as a cycle in figure 1.

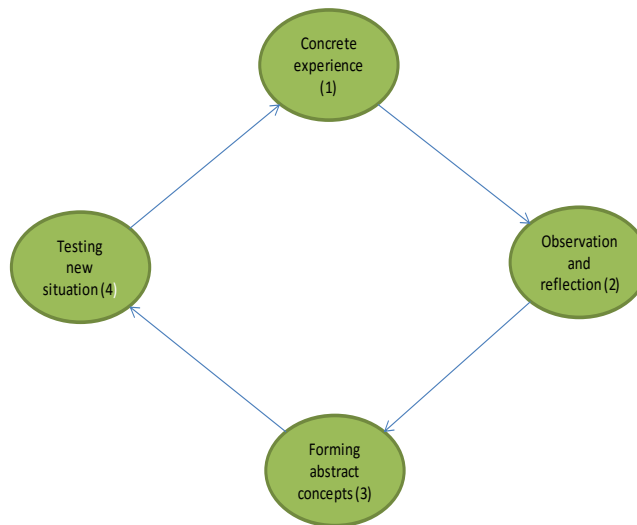


FIGURE 1 Kolb's Experiential Learning Cycle (Kolb, 1976, pp. 21-31.)

Kolb and Fry (1975) argue that the learning cycle can begin at any one of four elements: concrete experience, observation and reflection, forming abstract concepts and testing new situations, (Kolb, 1976, pp. 21-31) and that it should really be approached as a continuous spiral. However, the learning process can begin at any stage with a person carrying out a particular action and then seeing the effects of the action in this situation, but typically it begins with a concrete experience. Experiential learning uses the learner's own experience and his reflection about that experience. In the experiential learning model the *educator* (teacher, coach or mentor) is in essence the *facilitator* of a person's learning cycle. Educator is the person who helps individuals (managers, principals, professionals) to reflect upon the theories-in-action. (Finger & Asún, 2000, p. 46.) The benefit of experiential learning model is as it is an effective educational method by engaging the learners in a very personal manner by assisting the learners to fulfil their personal learning needs; it is about creating an experience where learning can be facilitated. We can see the benefits of experiential learning model in the fusion school setting in the new acquired *pedagogic mentor system* in the local teachers' own education reform environment. This model is an effective educational method which engages the learners in a very personal manner by assisting the learner to fulfil their personal

learning needs. Experiential learning is about creating an experience where learning can be facilitated.

Experiential learning is characterised by sanctioning the following statements: 'People learn best from their own experiences. What people do is more important than what they know. Beyond knowledge into skill by generating learning experience (learning-by-doing). The learning process should be enjoyable, motivating and rewarding. Respect the learners' ideas and choices. An atmosphere of support. Stand back and reflect when challenges and pressures become strong. Attempt at doing something new or different is more significant than the result. Effective learning requires small controlled steps outside comfort zones.' (Priestley, 2015).

As important the facilitator is in the learning process so is the learner itself. Effective learning entails the possession of four different preferred manners of dealing with information processing: concrete experience, reflective observation, abstract conceptualisation and active experimentation. (Kolb & Fry, 1975, pp. 33-57.) A learning style inventory (Kolb, 1976, pp. 21-31) was designed to place people on a line between concrete experience and abstract conceptualisation and active experimentation and reflective observation. Using this frame Kolb and Fry (1975) proceeded to identify four basic types of learners according to their traits: convergers, divergers, assimilators, and accommodators. Below in figure 2 the learners' learning traits are fitted in with the learning cycle.

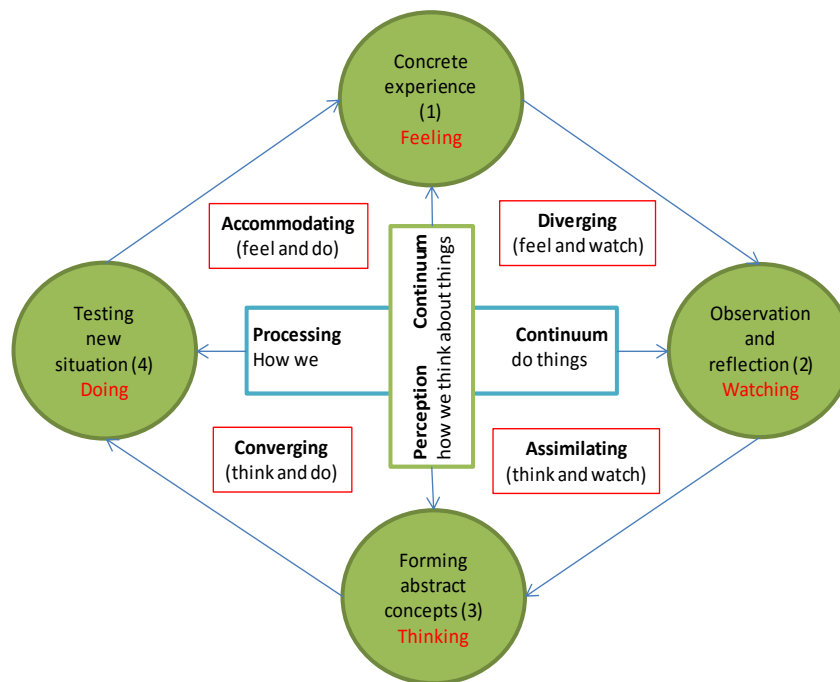


FIGURE 2 Experiential Learning Style theory and Four stage learning cycle (Kolb 1976, pp. 21-31.)

The personal trait aspects of the *convergers*, *divergers*, *assimilators* and *accommodators* are studied in more detail by Tennant (1996) and explained in table 3. Kolb (1976) recognised that there are strengths and weaknesses associated with each learning style and that being locked into one trait can put a learner at a serious disadvantage. Kolb himself viewed the inventory as the model's greatest limitation as it is based on the way learners rate themselves. It does not rate learning style preferences through standards or behaviour, and gives only relative strengths within the individual learner, not in relation to others. (Kelly, 1997.)

TABLE 3 Kolb and Fry on Learning Styles (Tennant, 1996.)

Learning style	Learning characteristic	Description
Converger	Abstract conceptualization + active experimentation	Strong in practical application of ideas, can focus on hypo-deductive reasoning on specific problems is unemotional, has narrow interests.
Diverger	Concrete experience + reflective observation	Strong in imaginative ability is good at generating ideas and seeing things from different perspectives. Interested in people, has broad cultural interests.
Assimilator	Abstract conceptualization + reflective observation	Strong ability to create theoretical models and excels in inductive reasoning. Is concerned with abstract concepts rather than people.
Accommodator	Concrete experience + active experimentation	Greatest strength is doing things. Is more of a risk-taker. Performs well when required to react to immediate circumstances. Solves problems intuitively.

Experiential Learning model is manifesting directly in the fusion schools' University based professional development program's group learning initiative. The fusion school is a community of learners from two dissimilar cultures acting as facilitators and individuals for common educational purpose. The Experiential Learning model has strong aspect of learning-by-doing and how personal experiences shape the learning process through reflection. In the fusion school the mentoring of pedagogic practices is conducted by modelling best practices in classrooms and sharing learning in *souks* where these methods and practices are distributed between the teaching staff. However, there are some additional limitations to Kolb's theory. The model does not really take into account different

cultural experiences or conditions such as inter-culture; the inventory has been used within a fairly limited range of (mainly Western) cultures (Kolb and Fry, 1976.) There is a need to consider the different cultural models of selfhood. (Forrest 2004.) This is an important consideration if we approach learning as affected by environments. It is important to take account of differences in cognitive and communication styles that are culturally-based.

2.2.3 Model of Organisations as Interpretation Systems

Daft and Weick (1984, p. 285) on the other hand present organisations as interpretation systems and learning is concentrated on in the theory mainly as holistic organisational action rather than individual processing. The theory is complex and to delve deeply into its domain would mean lengthy explanations, therefore' for the purpose of this thesis the model of organisations as interpretation systems is narrowed into a succinct explanation of the main definitions and assumptions with clarifying illustrations.

Daft and Weick (1984) call organisations *interpretation systems* and examine how organisation systems interpret their environments. "Information about the external world must be obtained, filtered and processed into a central nervous system of sorts in which choices are made. Organisations must find ways to know the environment", (Daft & Weick, 1984, pp. 284-295) and interpretation is the process through which information is given meaning and actions are chosen on the organisational level. They view that there is one best solution for each problem and that interpretation is the link between the data that is gathered and that final choice. The distinctive feature of information activity on organisational level is again sharing. A piece of data, a perception and cognitive map is shared among managers, who constitute the interpretation system. (Daft & Weick, 1984, p. 285.) Simplified; Daft and Weick's (1984, p. 285) interpreting model highlights two dimensions of the interpretation model that are impacted by different organisational types. The first dimension is management's beliefs about whether the environment can be analysed. The second dimension is the extent to which the organisation intrudes

into the environment. (Daft & Weick, 1984, p. 293.) They further explain the interpretation process and determine the categories that affect organisational effectiveness in its exchange with external stimuli. The inter-connectedness and impact of the interpreting system toward other organisational components are also discussed.

The model presented is based on *four assumptions*: 1. The 'basic assumption consistent with Boulding's scale of system complexity is that organisations are open social systems that process information from the environment and must interpret the environment's complexity in order to survive. (Daft & Weick, 1984, p. 285.) 2. Individuals process information, not the organisations, but both individuals and organisations have different interpretation systems. 3. Managers formulate the organisations interpretation. 4. Organisations differ systematically in the way they interpret the environment. (Daft & Weick, 1984, p. 285.) The authors further propose a process that encompasses a feedback loop of scanning (data collection), interpreting (giving meaning to data) and learning (taking action) to illustrate the relationship of interpretation to scanning and learning as the basis for a model of organisational interpretation. (Daft & Weick, 1984, p. 286.) Figure 3 illustrates the relationship of interpretation to scanning and learning as the basis for a model of organisational interpretation. (Daft & Weick, 1984, p. 286.)

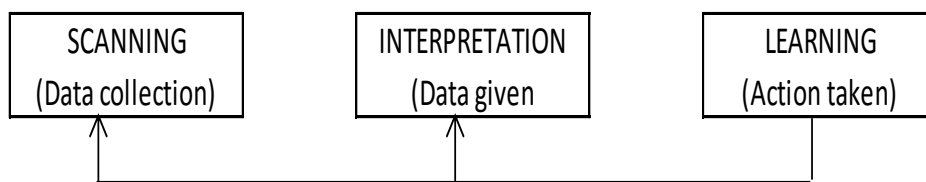


FIGURE 3 Relationship among Organisational Scanning, Interpreting and Learning (Daft & Weick, 1984, p. 286.)

Based on that argument, Daft and Weick (1984, p. 285) stress the importance not only to determine *how* the organisation interacts with the environment, but also to evaluate *what mechanisms are deployed* to incorporate the environmental boundary

and what actions are taken to apply internal adjustments that change the internal subsystems which in turn influence learning. In essence, the external environment cannot be scanned, interpreted and learned effectively unless organisations align it with the internal environment (e.g. strategy, culture, structures, processes, people, etc.) Through these three steps there is feedback which actually allows the application for learning Daft and Weick (1984, p. 289) believe that there are four different modes that organisations adopt to interpret the data they gather which is explained below. Based on the idea that organisations may vary in their beliefs about the environment and in their intrusiveness to the environment they can be categorised according to interpretation modes (Daft and Weick, 1984, p. 288) as illustrated as interpretation behaviour in Figure 4.

<p style="text-align: center;">ASSUMPTIONS ABOUT THE ENVIRONMENT</p>	<p style="text-align: center;"><i>Unanalyzable</i></p>	<p style="text-align: center;">UNDIRECT VIEWING Constrained interpretation. Non-routine, informal data. Hunch, rumour, chance opportunities</p>	<p style="text-align: center;">ENACTING Experimentation, testing, coercion, invent environment. Learn-by-doing</p>
	<p style="text-align: center;">Analyzable</p>	<p style="text-align: center;">CONDITIONED VIEWING Interprets within traditional boundaries. Passive detection. Routine, formal data.</p>	<p style="text-align: center;">DISCOVERING Formal search. Questioning, surveys, data gathering</p>
		Passive	Active
		ORGANIZATIONAL INTRUSIVENESS	

FIGURE 4 Model of Organisational Interpretation Modes (Daft & Weick, 1984, p. 289.)

Organisations can be viewed according to what mode of interpretation approach they employ in their organisational strategies: *Undirected viewing* - the environment is un-analysable (need to use clues) and passive (take time to make right decision). *Conditioned viewing* - the environment is analysable (no clues needed) and passive (take time to make right decision). *Enacting* - the environment is un-analysable

(need to use clues) and active (more 'guess and check' experimentation). *Discovering* - the environment is analysable (no clues needed) and active (more 'guess and check' experimentation). (Collinson & Cook, 2007, p. 22.) The amount of data the organisation collects is also important. The interpreting model presented is supported by other characteristics such as whether data sources are collected either internally or externally and the way managers meet on an estimated interpretation. (Daft & Weick, 1984, p. 285.) These both influence the outcomes of the interpretation process. Accomplishing union among organisational members enable organisations interpret as systems. (Collinson & Cook, 2007, p. 23.)

Daft and Weick's (1984, p. 289) model makes certain predictions based on the organisation's interpretation mode. In a manner, only some of these predictions have been tested empirically in this case study to prove their weight. Furthermore, human categories such as opinions, relationships, being biased etc. make interpretation in organisations complicated and difficult process. (Patton, 2002, p. 49.) Organisation modes range from being an active in altering the environment, to passive where organisations accept the environment without analysis. In between we have organisations in an active enacting mode where the environment is considered analysable and where the organisation invents its own environment and learns-by-doing to passive conditioned viewing approach which views the environment being traditional and the organisation rely on routine documents and data with their approach. (Daft & Weick, 1984, p. 286.) The data in this case study supports the conviction that the fusion school is in an active enacting mode where the environment is considered analysable and where the fusion school invents its own environment and learns-by-doing. How much learning is taking place is bound by the fusion schools' own parameters.

There are two additional variables in the model (figure 5) that also influence how organisations make sense of the environment and learn, these are strategy formulation and decision making. (Daft & Weick, 1984, p. 292.) In strategy formulation organisations vary from being prospectors with high resourcefulness where the environment is seen a changing and full of opportunities, analysers with occasional innovation and a careful approach, defenders with little scanning and

attention to maintain the internal environment rather than scanning the external, or reactors where there is no strategy and the organisations accept anything that comes along.

ASSUMPTIONS ABOUT THE ENVIRONMENT	Unanalyzable	<p>UNDIRECT VIEWING</p> <p>Scanning characteristics:</p> <ol style="list-style-type: none"> 1. Data Sources: external, personal. 2. Acquisition: no scanning department, irregular contacts and reports, casual information. <p>Interpretation process:</p> <ol style="list-style-type: none"> 1. Much equivocality reduction, 2. Few rules, many cycles <p>Strategy and Decision making:</p> <ol style="list-style-type: none"> 1. Strategy: Reactor 2. Decision process: coalition building 	<p>ENACTING</p> <p>Scanning characteristics:</p> <ol style="list-style-type: none"> 1. Data Sources: external, personal. 2. Acquisition: no department, irregular reports, and feedback from environment, selective information. <p>Interpretation process:</p> <ol style="list-style-type: none"> 1. Some equivocality reduction, 2. Moderate rules and cycles <p>Strategy and Decision making:</p> <ol style="list-style-type: none"> 1. Strategy: Prospector 2. Decision process: incremental trial and error
	Analyzable	<p>CONDITIONED VIEWING</p> <p>Scanning characteristics:</p> <ol style="list-style-type: none"> 1. Data Sources: internal, impersonal. 2. Acquisition: no department, although regular record keeping and information systems, routine information. <p>Interpretation process:</p> <ol style="list-style-type: none"> 1. Little equivocality reduction, 2. Many rules, few cycles <p>Strategy and Decision making:</p> <ol style="list-style-type: none"> 1. Strategy: Defender 2. Decision process: programmed, problemistic search 	<p>DISCOVERING</p> <p>Scanning characteristics:</p> <ol style="list-style-type: none"> 1. Data Sources: internal, impersonal. 2. Acquisition: separate departments, special studies and reports, extensive information. <p>Interpretation process:</p> <ol style="list-style-type: none"> 1. Little equivocality reduction, 2. Many rules, moderate cycles <p>Strategy and Decision making:</p> <ol style="list-style-type: none"> 1. Strategy: Analyser 2. Decision process: systems analysis, computation
		Passive	Active
		ORGANIZATIONAL INTRUSIVENESS	

FIGURE 5 Relationship between Interpretation Modes and Organisational Processes (Daft & Weick, 1984, p. 291.)

The authors conclude that organisation's members' past experiences can influence the way the organisation interprets data and thus change how they go about taking action - managers do the interpreting and almost all outcomes in terms of organisation structure and design whether caused by the environment, technology, or size, depend on the interpretation of problems or opportunities by the key decision makers. (Daft & Weick, 1984, p. 293.) The distinctive feature of an organisation is how everything is shared between its members. This collegial action

allows for union and the best type of action and sense making occurs. Individual members may leave the organisation but the organisational memory - its knowledge, past actions; history and database remain and thus direct the organisational interpretation processes.

2.2.4 Systems thinking

According to Senge (1990, p. 3) learning organisations are organisations, where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. The basic rationale for such organisations is that in situations of rapid change only those that are flexible, adaptive and productive will excel. For this to happen it is argued that organisations need to “discover how to tap on people’s commitment and capacity to learn at all levels”. (Senge, 1990, p. 4.) Routines, especially in the form of rules, policies and procedures represent experiential knowledge that is recorded as organisational memory, which itself is the way in which organisations preserve useful information and ideas from past experiences (Collinson & Cook, 2007, p. 25).

In order to understand the relations between organisation and the environment, we need systems thinking. The systems thinking theory of practice links the individual learning to the real work environment. This is extremely important for the implementation of organisational learning. Some researchers (e.g. Björk, 2006; Collinson & Cook, 2007, p. 5) agree with the necessity of systems thinking in organisational learning in school systems. Real learning gets to the heart of what it is to be human. We become able to re-create ourselves and transform. (Senge, 1990, p. 14.) This applies to both individuals and organisations, thus for a learning organisation it is not enough to survive. *Survival learning*, or what is more often termed *adaptive learning*, is important - indeed it is necessary, but for a learning organisation, *adaptive learning* must be joined by *generative learning*, learning that enhances our capacity to create.

The dimension that distinguishes learning from more traditional organisations is the mastery of certain basic disciplines or *component technologies*. Those five that Senge (1990) identifies are said to be converging to innovate learning organisations. They are: *Personal mastery - Mental models - Building shared vision - Team learning and Systems thinking*. Systems thinking, as the 5th discipline, fuse them into a coherent body of theory and practice. Senge (1990, p. 69.) recognises that people are agents and able to act upon the structures and systems of which they are a part. The disciplines are in this way concerned with a shift of mind - from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants, who shape their own reality, and from reacting to the present to creating the future.

Organisations learn only through individuals who learn, but individual learning does not guarantee organisational learning, however, without it no organisational learning will take place. (Senge, 1990, p. 139.) *Personal mastery*, according to Senge (1990, p. 141) is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively (*ibid.* p.7). It goes beyond competence and skills, although it involves them. It goes beyond spiritual opening, although it involves spiritual growth. (Senge, 1990, p. 141.) Senge (1990, p. 9) views *mental models* as deeply ingrained assumptions and generalizations, or even pictures or images that influence how we understand the world and how we take action. The discipline of mental models starts with viewing inwards. Learning to bare our internal pictures of the world, deliver them to the surface and analyse them carefully. The ability to carry on conversations where we learn to balance inquiry and defence, where people expose their own thinking effectively and make that thinking open to others. Moving the organisation in the right direction entails fostering openness. (Senge, 1990, p. 273-286.)

Building shared vision involves ability to hold a shared picture of the future we seek to create. The practice of shared vision involves the skills of discovering shared pictures of the future that foster genuine commitment. In mastering this

discipline, leaders learn the damaging effects of trying to dictate a vision, no matter how sincere. (Senge, 1990, p. 9.) Team learning is viewed as “the process of aligning and developing the capacities of a team to create the results its members truly desire” (Senge, 1990, p. 236). It starts with dialogue, the capacity of members of a team to suspend assumptions and enter into a genuine thinking *together*. Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organisations. Unless teams can learn, the organisation cannot learn. (Senge, 1990, p. 10.) The curriculum team in the fusion school is an excellent example of continuous learning process where the team learned by perpetual inquiry, dialogue and questioning the existing practices.

Systems thinking are the cornerstone of the learning organisations. Due to the changing economic and political categories that are also affecting education, educators have been forced to look outward and develop a better understanding of the dynamic relationship between society and schools. (Björk, 2006, p. 1.) It has become necessary for school leaders to alter the way they think about their work. In organisations that are strongly technology orientated, such as schools with high technology teaching and learning environment, members need information, but they also need ways to understand and apply that information both individually and collectively. (Collinson & Cook 2007, p. 5.) Systems thinking require the disciplines of building shared vision, mental models, team learning, and personal mastery to realise its potential. It also entail commitment and strong visionary leaders. Building a shared vision fosters commitment on the long-term. In a learning organisation leaders are designers, agents and teachers. They are responsible for building organisations were people continually expand their capabilities to understand complexity, clarify vision, and improve shared mental models – that means they are responsible for learning. Learning organisations will remain a good idea... until people take a stand for building such organisations. Taking this stand is the first leadership act; the beginning to inspire vision of the learning organisation. (Senge 1990, p. 340.)

At the heart of a learning organisation is a shift of mind, metanoia, from seeing ourselves as separate from the world to connected to the world, from seeing

problems as caused by someone, or something out there, to seeing how our own actions create the problems we experience. A learning organisation is a place where people are continually discovering how they create their reality and how they can change it. (Senge, 1990, p. 340.)

The organisation's policies, strategies and systems are key area of design, but leadership goes beyond this. Integrating the five component technologies is fundamental. The first task entails designing the governing ideas - the purpose, vision and core values by which people should live. Building a shared vision is crucial early on as it fosters long-term direction and is vital for learning. (Senge, 1990, p. 344.) These are strategies that should be considered by all principals taking on a new school or transforming a school. The equilibrium and balance must remain in order for the school to be able to apply organisational learning principles at work. Teachers seek stimulating challenges and they are all intrinsically motivated. They need meaningful work assignments, safe working climate, the respect of each other and developmental paths in their role as efficient and valued members of the organisation. Leader as teacher is not about teaching people how to achieve their vision - it is about fostering learning for everyone. Such leaders help people throughout the organisation to develop systemic understandings. Accepting this responsibility is the antidote to one of the most common downfalls of otherwise gifted teachers - losing their commitment to the truth. (Senge, 1990, p. 356.) The carrying force in the case study school has definitely been organisational trust among the participants. The organisation's policies, strategies and systems were the key focus area in the beginning, but failure to integrate all components successfully and the insufficient facilitation of shared learning opportunities for all was noteworthy.

Change always involves some resistance and some accommodation. The shift to a knowledge - based society underscores the importance of systemic thinking in creating and embedding new knowledge and understandings (Collinson & Cook, 2007, p. 5). By using systemic thinking leaders and members of the organisation can begin to better fathom different relationships, patterns and correlations occurring

within the organisation (Collinson & Cook, 2007, p. 6). Does it entail that systemic thinking is essential for organisational learning? Understanding theories behind actions definitely will open up the big picture of learning within the organisation and be an invaluable aid in facilitating change elements in schools that are going through transitional periods.

The systems viewpoint is generally oriented towards the long-term. That is why delays and feedback loops are important. In the short term they can be often ignored as they are inconsequential, but in the long term they matter. (Senge, 1990, p. 92, 139.) Senge (1990, p. 92, 139) advocates the use of systems maps – diagrams that show the key elements of systems and how they connect. Despite people often have a problem seeing systems and it takes work to acquire the basic building blocks of systems theory and to apply them to an organisation. On the other hand, failure to understand system dynamics can lead us into cycles of blaming and self-defence.

2.2.5 Strategic Learning Cycle

The Strategic Learning Cycle is a model, which explains change both at individual, team and organisational levels. Pietersen (2002, p. 2) developed strategic learning as a process for creating and implementing breakthrough strategies on an on-going basis to create an adaptive organisation. Pietersen's Strategic Learning Cycle process has four steps. They all build on one another and are repeated in a continuous dynamic cycle of renewal which Pietersen calls Strategic Learning. As Charles Darwin stated "it is not the strongest of the species that survive, nor the most intelligent, but the most responsive to change." (Holroyd, 2012, p. 28).

My reason for including Pietersen's Strategic Learning cycle in the study, although it is developed with large industrial companies in mind - a domain where Pietersen worked for 20 years as CEO - is its simplicity in providing clarity and structure in renewal. Strategic Learning drives for continuous adaptation in a similar manner to Experiential Learning Style theory and Four stage learning cycle by Kolb (1976, pp. 21-31.) This model is designed for leadership in mind and provides tools for guidance in strategic planning and to visionary processes.

The key is to think learning as a cycle, not as a straight line. By simply following the Strategic Learning process once is not sufficient, the challenge is to repeat it over and over so that an organisation continuously learns from its own actions and from scanning the environment and then modifies its strategies accordingly. This results in an on-going renewal inside the organisation and the more often the cycle is repeated in the organisation, the better the outcome will be. Continuous on-going renewal is characteristic of truly adaptive organisation. (Pietersen, 2002, p. 9.)

According to Pietersen (2002, p. 11), Strategic Learning must be inbuilt into the organisation and strategic innovation is considered more important than “random actions and ad hoc initiatives. It must be the central core of operational principles and offer systemic support in practical leadership processes”. Below figure 6 is demonstrating how the four-step cycle may support leadership in an organisation.

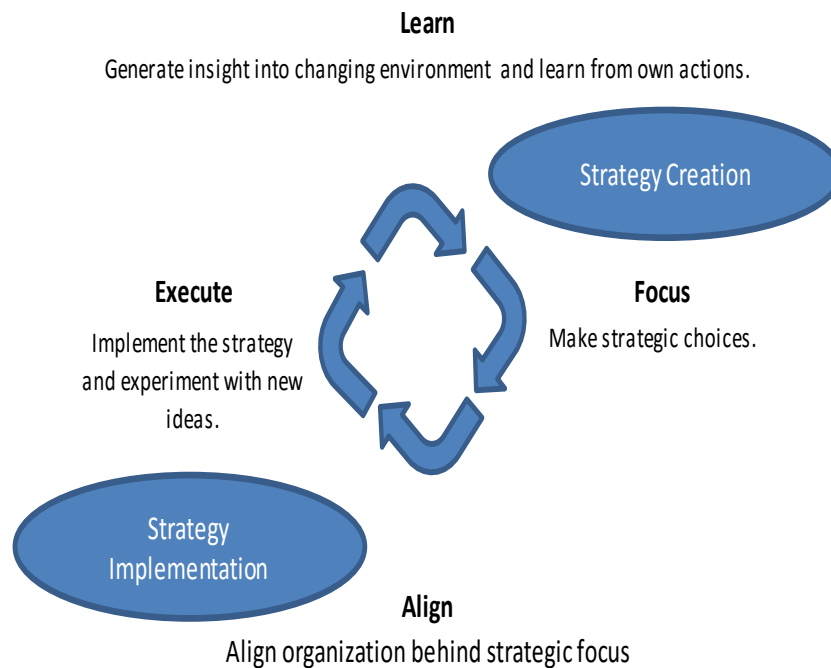


FIGURE 6 Four step cycle (Pietersen 2002, p. 9.)

This process involves a particular sequence of which each one is designed to develop specific outputs that feed on to the next stage of the cycle (Pietersen, 2002, p. 11.) However, as life itself is not straight forward, neither is the cycle of learning, therefore, it may be necessary to repeat a certain step or loop back in order to learn. Learning always involves repetitions and revisions so this cycle is also to be used as a useful learning cycle as long as each step is used in the cyclical process in same manner to the experiential learning cycle demonstrated by Kolb (1976, pp. 21-31).

Pietersen (2002, p, 10) sees the initial starting point in supporting leadership the situation analysis and essential diagnosis of the situation. Here we develop superior insights as the basis for the organisation's strategic decisions. This step involves scanning the external environment for trends and internal innovative workshops and dialogue as seen in figure 7 below.

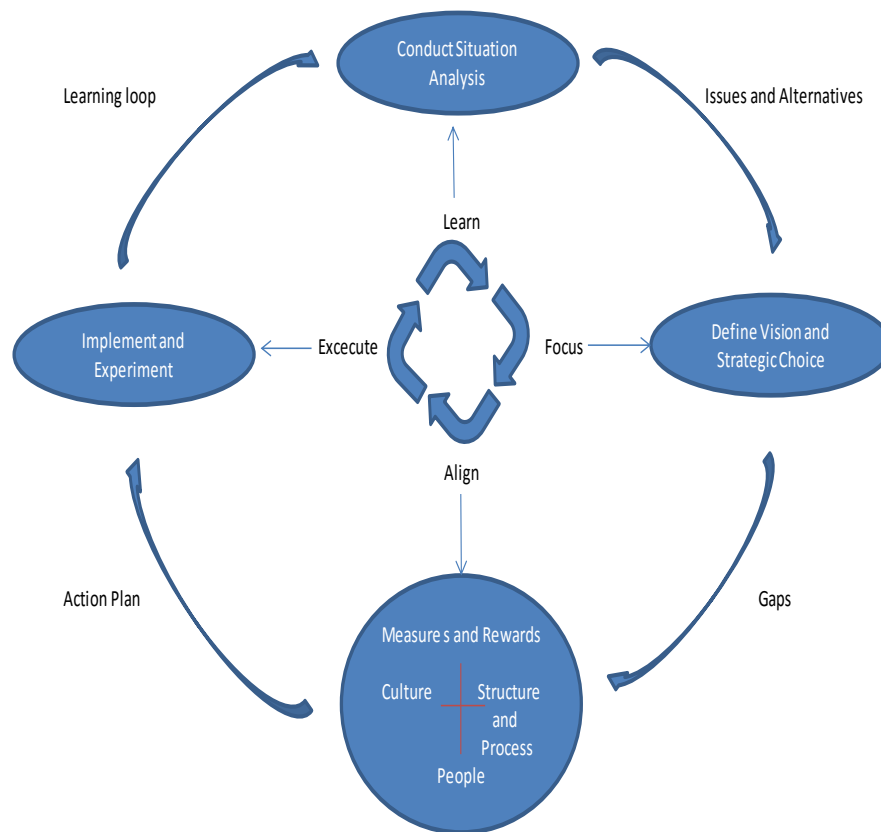


FIGURE 7 Strategic Learning: The Leadership Process (Pietersen 2002, p. 11.)

Step two is the focus: defining vision and strategic choices. Vision has an energizing and unifying effect on organisations. To make the correct strategic choices to capture the vision on everyone's lips is the challenge. The strategy must be in line with the organisation vision. Pietersen's Strategic Learning process is designed to ensure that the choices you make are based on insight rather than guesswork and that you make the most intelligent choices possible. (Pietersen, 2002 p. 15.) The strategic choice is described in figure 8.

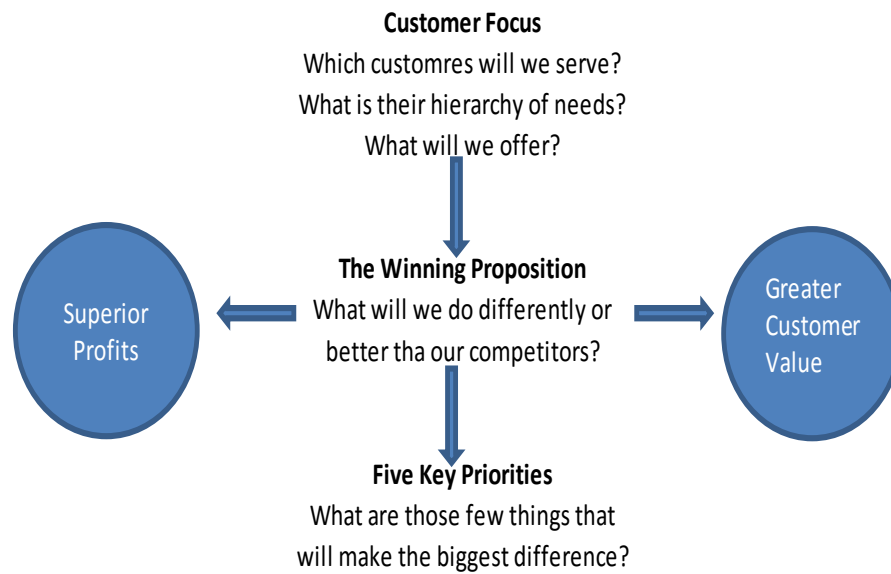


FIGURE 8 The Strategic Choices (Pietersen 2002, p. 14.)

The Strategic Choices contain three elements: Customer Focus, Winning Proposition, and Five Key Priorities. These strategic steps have been written to an organisation in an industry but can easily be transferred to school setting and in education learning. The Strategic Learning cycle thus provides a clear and practical tool to determine where the school is in its organisational learning stage and how to improve the strategic practices to be more even efficient. Today's competition in the education front is intense and all the best ideas are global. Education has begun to surface in the markets as a financial commodity and if there is a better idea somewhere else on the market, it will compete sooner or later and try to overtake what you have accomplished, so there is an established organisational competition in education in the same manner as among the great industrial companies. Understanding this we can be the best by acting the smartest. (21st Century Skills, 2008, p. 10)

Third step in the Strategic Learning cycle is the *alignment* of the organisation behind the agreed strategic focus. The implementation of the strategy is probably the most difficult part without a good project management. It means that all the key supporting elements of the business system are lined behind the chosen strategy

(Pietersen, 2002, p.17.) According to this Strategic Learning the trick is to make the key elements of the business system reinforce each other in support of the strategy. Pietersen explains this process by thinking about the organisation as an ecosystem – a rainforest or a desert oasis. “An ecosystem functions successfully only when its interdependent elements support one another. When any single element does not play its supporting role or when the elements work against each other, the system fails.” (Pietersen, 2002, p. 19.) The alignment of the organisation is described in figure 9.

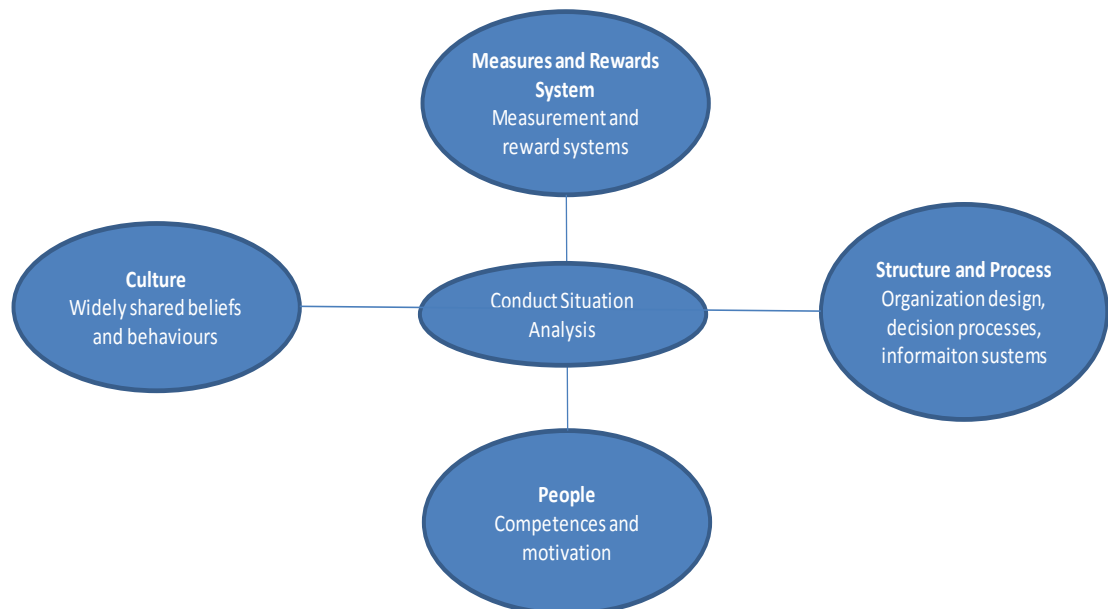


FIGURE 9 Alignment of the organisation (Pietersen 2002, p. 19.)

Pietersen makes a note that success does not come from isolated incidences, but from orchestrated right interactions. It is necessary to examine each element in turn and make the changes necessary to ensure they are acting in concert to support the strategy. (Pietersen, 2002 p. 19.) Take culture for example. Each culture has its particular set of rules and rewards including sanctions to promote or suppress certain behaviours. This applies also to businesses and schools systems.

Organisations values and beliefs, including the necessary measures and rewards put in place to support wanted behaviour and extinguish undesirable one, must support its strategy directly. Without this learning will not take place and the organisation or school is in jeopardy.

The step four in the Strategic Learning cycle represents executing the strategy. This means that the organisation has its workforce (e.g. in school teachers, administration and other staff) fully committed, energized and behind the agreed strategy. Now it is time to implement the strategy, which according to Pietersen, include a deliberate set of experiments to fuel organisational learning. (Pietersen, 2002, p. 23.) We can never be completely certain what work and what does not work, therefore the experiments allow organisations to make mistakes and learn from them. Once the execution of the practices found appropriate and beneficial for the strategy are implemented it is time to update the insights and learning by examining the organisation's own actions and by re-scanning the environment it modifies its future actions accordingly. This way we move on back to the step one - situational analysis - in the Strategic Learning cycle.

The success of the Strategic Learning cycle is dependent on the leadership and how the leader manages the strategy. There are certain qualities needed to be a good leader; self- awareness, empathy, motivation, sociability, and political adroitness - qualities that are often referred to as emotional intelligence. These traits according to research make the most effective leaders. (Pietersen, 2002, p. 23.) The leader also needs to be knowledgeable of various leadership theories that underpin solid leadership practices. Knowledge is power. The leadership qualities needed and strategies Pietersen implemented to leaders in order to improve the quality of leadership to foster organisational learning tie in intensely with Collinson and Cook (2007, p. 6) theory on organisational learning. With the Strategic Learning cycle of four steps: learn - focus - align and execute, Pietersen (2002, page) provided the practical tools for not only of *what*, but also *how* executives and leaders can turn ideas into action.

2.2.6 Use of Individual, Group and System learning

Organisational learning is the deliberate use of individual, group and system learning to embed new thinking and practices that continuously renew and transform the organisation in ways that support shared aims. (Collinson & Cook, 2007, p. 13.) Organisational learning is deeply involved in individual learning and the sharing of this knowledge and those skills in the workplace. The ambience and environment in the work place is the one that determines how successful organisational learning will be in that organisation. Many schools automatically expect themselves to be learning organisations as learning takes place in them all of the time. New curricula are implemented, new mandates, rules, regulations and people come and goes each bringing in something new to the organisational knowledge pool. Nevertheless, “organisational learning is more deliberate process. It involves organisational members actively addressing problems and issues rather than automatically accepting obvious or time-tested solutions. It relies on discovering erroneous assumptions, questioning existing ways of operating, learning from mistakes, and ensuring that useful ideas and innovations spread beyond individual members.” (Collinson & Cook, 2007, p. 15.)

Collinson and Cook (2007, p. 8) see organisational learning as deliberate, embedded and renewing; a view that also the previous theories share. The view to organisational learning is that it is predominantly action based. The authors have formed their theory in line with the previously introduced theories and by examining some common assumptions in these formulated their action based theory. Each assumption in the theory is necessary for organisational learning, but not by itself sufficient to ensure or define organisational learning. When they are put together they form a foundation for their definition of organisational learning: “The deliberate use of individual, group and system learning to embed new thinking and practices that continuously renew and transform the organisation in ways that support shared aims.” (Collinson & Cook, 2007, p. 31.) The core assumptions are presented in table 4.

TABLE 4 Core assumptions (Collinson & Cook, 2007, p. 32.)

1. Organisational learning is multilevel in the sense that it depends on learning at individual, group and organisational levels.
2. Organisational learning requires inquiry (e.g. to test assumptions, detect errors, or uncover taken-for-granted routines).
3. Organisational learning relies on shared understanding among members. These (often tacit) understandings integrate lessons about the relationships between actions and outcomes that underlie organisational practices.
4. Organisational learning at its best involves both behavioural and cognitive change (double- loop learning).
5. Organisational learning includes embedding new knowledge and practices in organisational theories-in-use or routines.

Collinson and Cook share viewpoint that individual learning is important, but does not constitute organisational learning until it is shared within the members of the organisation in a team or group to facilitate knowledge dissemination. Learning takes place in many levels in the organisation, such as among the individual and group level and leadership level, which support the improvement of teaching and learning. Inquiry can also be the focus of learning on any level. (Collinson & Cook, 2007, p. 89.) In order for organisational learning to occur, learning agents - "discoveries, inventions, and evaluations must be embedded in organisational memory They must be encoded in the individual images and the shared maps of organisational theory-in-use from which individual members will subsequently act. If this encoding does not occur, individuals have learned, but the organisation has not." (Argyris & Schön, 1978, p. 19.)

In Collinson and Cook's (2007, p. 8, 60) theory there are 6 strategies for having potential to support organisational learning in schools: prioritising learning for all

members, fostering inquiry, facilitating the sharing of knowledge, practising collegial relations, attending to human relationships and providing for members' self-fulfilment.

Fostering organisational learning is the key role in organisational learning in schools. Building up teachers' capacity is the long term strategy which will eventually benefit the students and the society at large. Very importantly, principals should know that teachers also need to learn how to collaborate with each other. Good leader realises the opportunities with collaboration and co-operation and aims to empower teachers to acquire roles, which either require exceptional skills and dedication to the cause, or extended responsibilities within the school administration. (Collinson & Cook, 2007, p. 89.) Teachers have the capacity to deal with varied complex situations occurring in schools and they possess the vision to steer the school in correct direction regard to learning. Teachers are experts in learning and often unfortunately will not receive the trust and authority to make decisions on their own without principal's approval.

Both vertical collaboration and lateral collaboration are effective ways of promoting organisational learning according to Collinson and Cook (2007, p. 210.) Not only should the principal support the teachers to work and learn together, but the teachers must equally support the principal in working and learning within the school team. A good and strong forward reaching school is one where everyone works as a team within a circle of trust and also where staff supports the leadership. Learning creates equals, not subordinates. With this regard collaborative learning may contribute to shared governance and shared governance will encourage organisational learning.

Democratic principles - truth and transparency, representation, vigorous discussion, freedom of speech, and pluralism act as a cornerstone of democratic organisations and societies. (Collinson & Cook, 2007, p. 62.) However, even in the best of schools conflicts occur as people are different and chemistries vary. Organisational learning is dependent on the social system in which human beings interact with each other to construct their learning and learn from each other.

Learning is also dependent on interpersonal knowledge, communication skills, respect and compassion, optimism, conflict management and group processing skills. (Collinson & Cook, 2007, p. 62.) Conflicts also may act in favour of organisational learning in some situations. They can uncover problems, barriers, and misunderstandings within the organisation. Nurturing members' quest for meaningful values and goals, commitment and connections, and aspirations for growth (Collinson & Cook, 2007, p. 62) provide for self-fulfilment. This stimulates people to seek for challenges and self-development. By providing for members' self-fulfilment we find the key element of organisational renewal that require leadership and learning opportunities at every level. (Collinson & Cook, 2007, p. 175.)

The organisations role is to assist members to learn and to offer opportunities to practise the organisation's vision, ideals, espoused-theories-in-action (Argyris & Schön, 1978, p. 6-7) and to enjoy working in the organisation in a democratic school climate that supports trust and friendship building, communication and collaboration (ibid. p. 175.) This leads members' self-fulfilment that assists in organisational learning. An organisation that offers possibilities for growth and collaborative interdependent learning opportunities for employees must also ensure that the primary values of democracy prevails, such as is nurturing the well-being and capacity of employees. Professional growth for all in an organisation type of organisational renewal represents a major responsibility of executive leaders at the system level. They in turn rely on members to identify and communicate learning needs at the individual, group, and organisational level and to detect norms, routines and structures that are hindering (Collinson & Cook, 2007 p. 176), or need changing.

Organisational memory is embedded in past learning, and further continuing opportunities for organisational learning depend on socialising and retaining members in ways that value their well-being and promote self-fulfilment. (Collinson & Cook, 2007, p. 175.) This leads to organisational renewal at every level of the organisation. Building the capacity of members on a continuing basis is central to the organisational renewal process and ensuring that individuals find self-fulfilment in their work is an important executive leadership role. Both

continuity and change are needed for organisational renewal, but balancing these two can be a challenge. (Collinson & Cook, 2007, p. 54, 55.) To balance these two, organisations need to learn how to learn. This deuterio learning (learning to learn) meaning organisational capacity to set and solve problems and to design and redesign policies, structures, and techniques in the face of constantly changing assumptions about self and the environment. (Collinson & Cook, 2007, p. 53.) Daft and Weick (1984) also based a great role for observing and interpreting the environment in organisational learning.

According to Collinson and Cook (2007, p. 89) direct inquiry is the purposeful pursuit of feedback and testing of assumptions or claims, a necessary part of organisational learning. Indirect inquiry is the purposeful surfacing of tacit knowledge (e.g. insights, ideas, perceptions) to understand or make sense of the environment and to stimulate innovation. (Collinson & Cook, 2007, p. 89.) It usually follows that transforming and learning organisations have people who know the work and are capable of generating ideas for improvement and where new employees are mentored. Inquiry should be integral part of organisational membership. These cycles of inquiry facilitate the move towards the organisations aims and goals. They also detect errors and clarify problems within quicker. Open-mindedness, interests in what the school is accomplishing, genuine desire to learn and intellectual responsibility all increase collateral learning in any school and organisation. (Collinson & Cook, 2007, p. 96.)

A shift from individual orientation to community orientation means that many teachers indulge in professional development and in life-long learning studying courses in various fields of education to improve subject knowledge or to conduct research on some particular educational issue. This is individual learning. As Senge (1990, p. 10) already earlier stated, schools that are community orientated foster organisational learning by collective inquiry and transparency. Organisations that are open-minded to alternative possibilities, listening to multiple viewpoints and shares control of tasks and acts collaboratively enrich themselves by having strong and capable workforce that is ready for continuous renewal and challenge.

Collective inquiry is the process of building shared knowledge by clarifying the questions that a group will explore together where problems and errors are detected and resolved. (Collinson & Cook, 2007, p. 94.) Teacher inquiry (action research) is a powerful tool for professional development and school improvement and those closest to the situation take appropriate action to solve their problems (Collinson & Cook, 2007, p. 96).

Successful communication is often face-to face dialogue, where dialogue represents two-way horizontal communication instead of vertical communication (Collinson & Cook, 2007, p.154). In direct dialogue there is an element of vulnerability, even fear. I have been in educational staff meetings where the other party has refused to state opinions in dialogue as long as there has been a particular member present. Once the 'problematic' person has left the room the dialogue continues. The information is nevertheless allowed to be passed on in writing but the participants prefer not to face each other. There is a gargantuan amount of social contact mediated through dialogue. According to Collinson and Cook (2007, p. 154) dialogue demands an environment where people feel secure enough to say what they really think and aren't afraid to expose their opinions or to ask for help. Intellectual safety needs to prevail in any organisation that is willing to learn and move forward.

There is more to communication than just the words that are conveyed. For example direct interpretations and immediate feedback speak for the advantage of direct dialogue. Dialogue may actually change thinking. Questioning skills are also essential to organisational learning. A professional teacher is constantly working with colleagues to come to a deeper understanding of the first critical question - What do we want each student to learn? In the curriculum development team the question goes - 'how can we adapt our curriculum to serve our students best?' Dialogue takes these questions to a deeper level of interpretation. In fostering organisational learning in schools we must secure the people in the organisation to be free to speak and to be heard. This necessitates professional attitude to informal conversations and dialogue where all participants are on equal terms and all opinions are equally valuable. Wenger (1998, p. 118) refers to informality as being

communities of practice who define themselves through engagement in practice, thus being essentially informal. Informal does not mean that the practice is disorganised or that communities of practice never have any formal status, but it evolves in organic ways that tend to escape formal descriptions and control.

In an organisation where there are many specialist professionals the dialogue may become a battle of supremacy. All members should contribute to the dialogue in an open-minded manner and to be willing to listen to arguments and suspend judgement. If there is a toxic interpersonal environment or the principal espouses dialogue but actually encourages competition among teachers, these are categories that may constrain dialogue in this school or in any organisation. (Argyris & Schön (1982, p. 8.) Moving from individual to collective learning requires relational trust among members. Schools with a strong relational trust have a shared commitment to a common purpose which is student learning (Collinson & Cook, 2007, p. 157).

Independence means autonomy on one's own doings and actions (Collinson & Cook, 2007, p. 160). E.g. a class teacher's autonomy is very important and established in Finland. All teacher trainees must complete Master's level research based degree for Master in Education and as a result graduate as teachers. Owing to the all-encompassing and thorough teacher training the 'powers to be' have decided that teachers are capable of deciding what is good for their pupils. This country trusts its teachers and allows them immense decision power. But it does not mean that the teachers would not develop their teaching together, on the contrary, they do engage in continuous dialogue good teaching practises. Independence and autonomy at work means academic freedom for teachers, the desire to avoid conflict, exercising personal prerogatives without scrutiny, and closed door classrooms. (Collinson & Cook, 2007, p. 161.)

Interdependence on the other hand is a relation between its members that each is mutually dependent on the others. This concept differs from a simple dependence relation, which implies that one member of the relationship can't function or survive apart from the other(s). In an interdependent relationship, participants may be emotionally, economically, ecologically and / or morally reliant on and responsible

to each other. (Collinson & Cook, 2007, p. 160.) Often interdependency occurs when there is a strong common cause between the participants. Interdependence can also be a common ground between aspirations. Information communication technology has allowed greater communication, interaction and interdependence. This has significantly facilitated the introduction of new ideas and enterprises. Interdependence requires collaboration among colleagues and is actually difficult to establish in schools. Teachers working interdependently together may require conflict management mechanisms and confidence building to help them overcome their feelings of vulnerability, when unveiling their beliefs and practices. (Collinson & Cook, 2007, p. 161.) There is no easy way to make all teachers to collaborate for the benefit of the organisation. Fostering organisational learning in schools is a vast, complex and demanding area that requires combined effort and expertise from the executives, management, principals and teaching professionals to successfully nurture the learning environment.

I have now visited briefly six theories associated to organisational learning in the educational setting. These theories will support to enlighten the nature of organisational learning and learning organisations as conveyed by the literature and to interpret the organisational learning manifesting in the case study fusion school and curriculum development.

3 RESEARCH METHODS

This chapter presents the background to the empirical unit as well as the context of the study, the aim of the research, the rationale for the qualitative single case study, the significance of the study and ethical considerations, the data collection and the qualitative data analyses. It includes 16 separate yet related components that review research methods and discuss procedures that will be used in the study.

3.1 Content Outline

The four major research questions in this study of organisational learning manifesting in the Emirati-Finnish fusion school's curriculum development are: What is the nature of organisational learning and learning organisations as conveyed by the literature? What are the expectations held in the school in relation to organisational learning in the fusion school setting? How does the organisational learning manifest in the fusion school's curriculum development? What is the importance of the curriculum in relation to organisational learning?

Earlier I provided a detailed theoretical framework of the central theories in organisational learning in educational setting which also explain the phenomena of *organisational learning* in general. The curriculum is in the heart of a school guiding the learning processes; hence it entails that the curriculum development process encompasses all learning taking place in the school. All chosen theories have many assumptions about organisational learning in common. There are not one that I can pin-point and say that this particular theory covers all of the organisational learning manifesting in the research. However, they do all share guidance in promoting organisational learning in the fusion school and they all provide useful insights on where to base strategic thinking. They also all offer practical solutions of which the school leadership can take heed in order to foster organisational learning environment and hence facilitate improvement of learning, teaching and leadership in the school. Argyris & Schön (1974, 1978, 1982, 1985, 1996, 1999), Kolb (1975, 1976,

1984), Daft & Weick (1984), Senge (1990, 2003), Pietersen (2002) and Collinson and Cook (2007) all agree that the core in any organisational learning is seeking to understand the society and to develop the skills required to influence social change and to renew and transform organisations to support shared goals. All of the above theories agree that leadership actions carry the torch for organisational learning within an organisation. They all share the view that organisational learning involves cyclical action, reflection and renewal. They also all agree to collaboration and sharing knowledge being the key to organisational learning.

3.2 Rationale for Selecting Qualitative Methods

I chose the qualitative deductive analytical case study method as we have a unique primary education partnership case that has an unusual concentration and interest field and therefore needs to be described and detailed. (Creswell, 2013, p. 98.) I will illustrate theoretically, and as an on-going empirical study for over two years, how organisational learning exhibits in this Emirati-Finnish fusion school's curricular development, and hence in this educational setting. This research studies organisational learning in this project school and specifically during the initial stages of merging curricular change.

The adaptation and fusion of the curricular developments between Abu Dhabi Education Council's National New School Model Curriculum and the Finnish educational experience began in 2010. During the period of 2010 to 2012 statistics and data was gathered in interviews, informal discussions, in discourse in the school and other relevant informal and formal settings. This data evidence constitutes a living proof of the point the participants in this delicate fusion project began and the distance the school stretched in the years of active participation in curricular fusion development and furthermore how organisational learning develops and manifests in educational fusion environment. This Education Partnership project (EPA) is seen important, not only to Finland as it is Finland's initial attempt to benefit financially from educational export, but also to all the employees in this EPA project. It requires a great deal of patience, determinations

and courage to relocate to a distant land so alien in culture and religiously diverse to one's own familiar setting, and to actively work toward establishing common goals and vision in order to reform the host educational provision with one's own knowledge and experiences of good educational practice. I was privileged to share this journey with many intelligent and capable teachers from the United Arab Emirates and Finland. As President Tarja Halonen visiting us in 2013 iterated: 'you are brave teachers, you are all so very brave.'

The originality value of this research is the key factor. This Emirati-Finnish educational fusion is truly first of its kind in the world, and has notable interest value to global educationalists. This type of fusion education partnership has not been researched before and to my true knowledge has not been reported elsewhere. I hope that the findings of this research will be open to everyone and that the school and both the major stakeholders, ADEC and EduCluster Finland will learn from them and consider the recommendations and the data for the benefit for any future partnership projects. This ongoing study has significant benefit to the school, as it will guide the school's operational principles according to the findings and support any good practices. The students will always benefit when organisational learning takes place in a school as teachers' own learning and personal development will directly improve student learning and well-being as methods of teaching and curriculum delivery are greatly enhanced during this research. This research also directly addressed areas of ADEC goals and strategies. No participants are named in the research paper, all information is strictly confidential and questionnaires are anonymous. The school is referred to as an Emirati-Finnish fusion school, or 'the school' in the data and in the Thesis. No children are directly involved in the research as the research is about teachers' learning in the organisation.

3.3 Description of Qualitative Methods

Qualitative research represents a broad framework for conducting educational studies and focuses on holistic descriptions in natural settings; it focuses on measurable variations between and among variables. (Anderman 2009, p. 3.)

There are five general characteristics of qualitative research by Fraenkel and Wallen; (1996, p. 427.)

1. Researchers collect their data in naturalistic settings by observing and participating in regular activities.
2. Data are collected via words and pictures (not numerical or quantifiable indicators)
3. Processes are as important as products.
4. Most qualitative researchers do not start out with specific hypothesis but rather use deductive methods to generate conclusions regarding observations.
5. Qualitative researchers care about participants' perceptions and are likely to question participants in depth about their beliefs, attitudes and thought processes. (Fraenkel & Wallen, 1996, p. 427).

I used ethnographic qualitative research method in this over two-year long ongoing case study. The research objective has been to collect first hand data through continuous dialogue and discourse taking place within the curriculum team members and the teaching and administration staff of the school and ADEC along with informal and semi-structured interviews, observations and ethno-historical account of categories. I have reviewed, identified and summarized concepts in the literature through document analysis that have helped to explain the organisational learning phenomena. I have generated from the data in the ethno-historical account a set of naturalistic generalizations and expanded those naturalistic generalizations to an analytical explanation (Patton, 2002, p. 583) for organisational learning in the curricular fusion development process. I will be

present the analysis of this ethno-historical account of categories and continuous observable data taking place from 1.9.2010, when the project began to 1.7.2012 when the research ended, (the EPA-project is still on going until 2015), drawing on included theories that bring depth to the content analysis.

3.4 Purpose of the Study

The purpose of my intrinsic case study (see Creswell, 2013, p. 98) is to develop a better understanding of the organisational learning taking place in the newly developed Emirati-Finnish fusion school - particularly within the school's curriculum development, during the period of onset of the beginning of this unique fusion, to two years on development when the first curriculum document was printed and presented to the stakeholders. This type of educational fusion between two extremely diverse countries is very special, interesting, challenging and has not been documented before. This study may open insight to organisational learning in a fusion education setting and has certain interest value. The purpose is not to judge or evaluate but to understand the phenomena. Nonetheless, qualitative research engages in-depth studies that generally produce historically and culturally situated knowledge. As such, this knowledge can never seamlessly generalise to predict future practice. (See also Tracy, 2010, p. 845.)

The very core purpose of this research is to present an in-depth understanding of organisational learning in the case study. I, the researcher, as an observant participant, was immersed in the day to day lives of the people; observed and interviewed the group participants, my colleagues, (see also Creswell, 2013, p. 90) using quantitative research methodology that enabled to obtain, first hand, contextually relevant knowledge and observations of real events during this two-year period 2010-2012. This data contributed to understanding perceptions of organisational learning, and learning organisation from the perspective of the individuals who participated in and experienced these events, which are reflected to relevant theories.

3.5 Participant Observer Method

I was able to participate in the activity at the site in this case study, therefore, my role as a researcher was more salient than that of a plain researcher role (see also Creswell, 2013, p. 166). It helped me to access insider views and subjective data while being part of the curriculum development work in the fusion school. Observing in a setting is a special skill that requires addressing issues such as the potential dishonesty of people being interviewed, impression management and my potential marginality as a researcher in this fusion setting. (see also Creswell, 2013, p.167.)

I logged the observed ethno-historical data and interviews in various memos, documents, workshop data sheets, curricular documents and sound recordings throughout the two years period. As an analyst, I am searching for the totality, or unifying nature of the particular settings - the gestalt. (see also Patton, 2002, p. 59.) The direct, personal contact with and observations of a setting have several advantages; first, through direct observations I am better able to understand and capture the context within which people interact, as understanding the context is important to a holistic perspective; secondly first-hand experience with a setting and the people within allows me to be transparent, discovery oriented and deductive due to not having to rely on prior conceptualisations of the setting; and third, I have the opportunity to see things that may routinely escape awareness among the people in the setting. (see also Patton, 2002, p. 262.)

Holistic ethnographies usually focus on developing a complex, complete description of the culture of the group in question, (Creswell, 2013, p. 90), yet this case study involves two divergent cultures in fusion, so the analysis is a case study rather than a pure ethnography, although it does have elements of ethnographic research at times. I, the researcher, am a member and the leader of the curriculum team and one of the initial members of the pilot educationalists, who moved to United Arab Emirates from Finland to begin the Emirati- Finnish experience fusion and curricular adaption in 2010 so my position was advantageous - para-phrased by Patton's (2002, p. 265) words; the full participant observation constitutes a

compendium field strategy in that it concurrently combines document analysis, interviewing of respondents and informants, direct participation and observation and introspection.

3.6 Researcher as an Instrument

The opportunity to immerse myself into the empirical social-world (see also Patton, 2002, p. 127) of this intrinsic case study as a researcher, means that I can get as close as possible to this life and to know what is going on in it. I can “lift the veils that obscure or hide what is going on...the veils are lifted by getting close to the area and by digging deep in it through careful study.” (Patton, 2002, p. 126.) I, the researcher, am the key instrument in this study aiming to understand the phenomenon of organisational learning in the fusion school’s curriculum development as a whole. This means that a description and interpretation of the fusion school’s organisation’s external context is essential for overall understanding of what has been observed during fieldwork or said in an interview. This is a holistic approach, which assumes that the whole is understood as a complex system that is greater than the sum of its parts. (see also Patton, 2002, p. 59.) This case study will define the major findings affecting organisational learning in fusion curriculum development.

I have collected data through examining documents, observing behaviour, and interviewing participants and not by relying on questionnaires or instruments developed by other researchers (see also Creswell, 2013, p. 45). Observing activities, interactions, what people say and do and the nature of the physical setting was important in my approach to the fieldwork (see also Patton, 2002, p. 295). But observing also what *does not* happen and making informed judgements about these can be among the most important contributions I make, because it can provide information that may be overlooked (see also Patton, 2002, p. 296). I selected instruments to illustrate organisational learning phenomena based on validity and reliability criteria. I made decisions regarding time and resources; fusion school

curriculum working documents and other recorded related data were used to demonstrate organisational learning manifestation. The analysis concludes my interpretations. (See also Patton, 2002, p. 63.)

3.7 Case Study Selection

The case selection is bounded to the single case of organisational learning manifesting in the curriculum development of a fusion school. The reason for this single case study is its phenomenal interest. This fusion has unique and broad complexities across the fusion setting therefore I chose to limit this study to a single case of providing an in-depth understanding of organisational learning in a bounded context, which is the fusion curriculum development. (See also Creswell, 2013, p. 101.)

As this research is about organisational learning in the fusion school and in particular within the curriculum adaption and development the case selection unit of analysis (see also Creswell, 2013, p. 104) consists of all the members of the fusion school curriculum team, administrative staff and the teaching staff of the school. Teachers and Heads of Faculty engaged in informal and semi-structured interviews and the principal, the curriculum team members and the EPA- project manager were interviewed individually and were continuously engaged in the ongoing discourse and daily dialogue with me involving the fusion curriculum development. The principals, EPA-project manager, Abu Dhabi Education Council Curriculum Team P-12, the Heads of Faculty in Arabic and English Medium and all teachers have all joined with me in the weekly and daily curriculum team work, innovation workshops, continuous curricular dialogue and semi-structured interviews in this two-year long discourse from the beginning of the curriculum development in 2010 until late 2012.

All participants in this study were school staff and teachers and they were all informed of the ongoing research process in the beginning of the curriculum work and of the study foci. The fusion school signed an ethics review committee approval for this research and they were all willing to participate fully in the study from the

beginning. Ethical issues in survey research are important categories to consider, as surveys must be carried out in ways designed to avoid risks to participants, respondents and interviewers. Informing and protecting respondents is a key feature of a survey. (Fowler, 2009, p. 164.)

The participants in the curriculum team have most data value as they were continuously directly involved in the fusion curriculum adaptation, development and direction processes. The other teachers in the school operate and work within the curriculum and are involved in the development and implementation processes and as active workshop members giving their valuable input in the way how the fusion curriculum is delivered and accessed and most of them partake in the fusion school's university based professional development program and are mentored by the Finnish teaching staff. All teaching staff in the school is subjected to organisational learning and hence are part of the sample participants in this research.

3.8 Data Collection

The data collection began in September 2010 and ended in late 2012. Initially, as a member of the curriculum team and the Chair/leader of this group, I had to gain the confidence of all participants by being transparent and honest at all times throughout the study and beyond, so from the very beginning my colleagues knew exactly what I was researching. They were all very motivated about the ongoing case study and many saw it as a positive boost to investigate learning and our educational mission in general. All of my dear colleagues have always presented information to me through collegial dialogue, private conversations and in broad opinions openly and with full confidence. I care about my participants' perceptions; therefore it was paramount to question participants in depth about their beliefs, attitudes and thought processes.

I was actually able to immerse myself into the empirical social-world of the fusion curriculum development process and get in the center of this fusion

education life and to really know what is going on in it by being leader, teacher, mentor, a colleague and friend during those initial years. Understanding the social situation from participants' perspectives was vital in this qualitative research. (See also Patton, 2002, p. 126.) I put aside my own biases and stayed focused on the objective, as Patton (2002, p. 129) phrases the approach to qualitative deductive analysis: "fundamentally realist and objectivist in orientation, emphasizing disciplined and procedural ways of getting own biases out of the way, but with a healthy dose of creativity to the analytic process."

The direction for data collection and analysis has included preparation, document analysis, informal and semi-structured interviews, an ethno-historical account of categories, all contributing to the development of organisational learning in the fusion development process. I have reviewed, identified and summarized themes and concepts in the literature through document analysis that have helped to explain the organisational learning phenomena. I have generated from the in-depth data collection in the ethno-historical account a set of naturalistic generalizations and expanded those naturalistic generalizations to an deductive qualitative analysis explanation for organisational learning in the fusion development process of this Emirati-Finnish fusion school. (see also Patton, 2002, p. 583.) I am focusing on the holistic purpose and the meaning of the phenomena and to seek deeper and further knowledge and understanding of the organisational learning processes in our fusion school setting. In practice this means holistic-deductive analysis (See also Patton, 2002, p. 67) where observations are made according to the research outcome.

I conducted a sampling strategy, developed means for documenting information; both recorded interviews, dialogue and workshops and on paper, organized storage for collected data, and also anticipated some ethical issues that may arise, such as anonymity and gaining access to the data and the protection of respondents. Data was collected in all curriculum team meetings, innovation workshops, staff meetings, in informal and semi-structured teacher interviews, teacher observations, continuous site observations and collegial and private discussions. Data accumulation was based on full availability, accessibility and the

affordability. I have conducted informal and semi-structured interviews, so my advantageous research position has enabled me to look directly into this empirical social-world of curriculum development and its relationship in the fusion school's organisational learning process.

3.9 Data Sources

As primary source I have the organisational learning phenomena in the Emirati-Finnish fusion school setting, which has not been previously researched. As Creswell (2007, p. 151) points out - to study one's own work place raises questions about whether good data can be collected when the act of data collection may introduce a power imbalance between me as a researcher and also a parallel colleague to the individuals being studied. The pros outweighed the cons in this case and I pursued the research due to the unique important opportunity it provided and with full support and encouragement of my colleagues.

Since I studied my own organisation it was recommended that multiple strategies of validation were used to ensure that the interpretation is accurate and insightful. (See also Creswell, 2013, p. 151.) The participant sources to the research are the fusion school staff: 24 Finnish teachers and ca 30 Emirati staff, who all had been informed of the ongoing study process and the research aim in the beginning of the fusion curriculum work. Not all Emirati staff took part in the interviews.

My employer, Abu Dhabi Education Council and the fusion school had both agreed to the research and signed an ethics review committee approval for it. They were all very willing to participate in the research from the start of the EPA program. The fusion school and EPA project was of the opinion that being part of the research promotes learning in the organisation.

This research did not bear any extra work or stress to anyone involved. The fusion curriculum development work is continuous and the recorded data of the field work is continuous recorded research documentation. The discourses and dialogues took place in and out of school time in relaxed general everyday

circumstances. Interviews were maximally two hour long. I have accessed these sources directly, meticulously explained the phenomena and provided insight into them. The four major research questions in this study and the sub questions presented to the interviewed are in appendix 4.

The interview questions were presented to members of the school's curriculum team, and the administration and all respondents provided lengthy recorded answers to each question. According to these interviews several of the staff in both nationalities did not understand the notion of organisational learning and needed pre clarification of the concept before being able to discuss the phenomena. Many of the staff had a very different view of the manifestations of organisational learning in the school, which can also be a reflection of their educational background.

3.10 Analysis Description

I have chosen a reflexive personal voice for the qualitative analyses. The influential distinction by Martin Buber, 1923 p. ix; Patton, 2002, p. 64) between "I-It" and "I-Thou" relationships explain more of the relationship and self-awareness that I, as a researcher, have to this study as a participant member. An "I-Thou" perspective acknowledges the humanity of both self and others and implies relationship, mutuality and genuine dialogue (Patton, 2002, p. 64) within the research process. Self-awareness is an asset in both the fieldwork and analyses in a case study. Developing self-awareness is a form of 'sharpening the instrument' (Brown (1996) in Patton, 2002, p. 65) and being reflexive involves self-questioning and self-understanding and examining of what I know and how I know it. (Patton, 2002, p. 65.) I chose the qualitative analytic research strategy (see also Creswell, 2013, p. 181) as my research is based on two years long on-going case study that will continue after the research is over.

I have linked categories from the data to analytic framework in literature and developed themes and provided an interpretation in light of the perspective of the literature (see also Creswell, 2013, p. 184). I have reviewed, identified and

summarized concepts in the literature through document analysis that have helped to explain the organisational learning phenomena. I have generated from the data in the ethno-historical account a set of naturalistic generalizations and using deductive analysis and content analysis searched explanations for organisational learning in the curriculum fusion development process of this Emirati-Finnish fusion school. (Patton, 2002, p. 453.)

3.11 Research Validity and Reliability (triangulation of data)

Long term assignment and tenacious observation in the field of the study include building trust with the participants, learning the culture, and checking for misinformation that may stem from misrepresentations introduced by the researcher. (Creswell, 2013, 9, p. 251; Patton, 2002, p. 248.) There are many perspectives and terms used in validation; internal validity and external validity, reliability and objectivity. Le Compte (1982, pp. 31-60) and Lincoln and Guba (1985, pp. 301- 327) used terms credibility, authenticity, transferability, dependability and confirmability. To operationalise these terms they propose techniques such as, sustained commitment in the field and the triangulation of data sources, methods and investigations to establish credibility (Lincoln & Guba, 1985, p. 323) and suggest that good qualitative research is dependable. Credible reports are those that readers feel trustworthy enough to act on and make decisions in line with. Credibility refers to the trustworthiness, verisimilitude, and plausibility of the research findings. (Tracy, 2010, p. 842.) Tracy (2010, p. 843) continues to argue that qualitative credibility is achieved through practices including thick description, triangulation or crystallisation, and multi-vocality and partiality.

Triangulation within a qualitative inquiry strategy can be attained by combining both interviewing and observations, mixing different types of purposeful samples, or examining how competing theoretical perspectives enlighten a particular analysis. In triangulation the researcher makes use of multiple and different sources, methods, investigators, and theories to provide supporting

evidence. In this study, I have linked the primary sources of the fusion school observable and recordable data to the six organisational learning theories depicted. Study can also be cut across inquiry approaches and combine qualitative and quantitative methods achieving triangulation. (Patton, 2002, p. 248.) My initial attempt was to send an electronic questionnaire to teachers, which back-fired, as no-one actually returned the questionnaire, except one participant. I then decided to abort the questionnaire method and continue with direct face-to-face recorded interviews which were successful.

Borrowing and combining elements from clean, or rational methodological strategies, can produce creative mixed inquiry strategies that explain variations on the theme triangulation. For example, the ideal qualitative methods strategy is made of qualitative data, a holistic-deductive design of naturalistic inquiry and content of case analysis. (Patton, 2002, p. 248.)

Tracy (2010, p. 841) distinguishes credibility, sincerity, self-reflexivity, transparency and resonance- transferability and naturalistic generalisations as perspectives in evaluating the validity of a research. By sincerity is meant that honesty is evident in the research and the researcher's biases, goals, and weaknesses are apparent with an explanation on how they influenced in the methods, elations, and errors of the research.

Self-reflexivity is one of the most well-known practices of qualitative research; meaning being honest and authentic with one's self, one's research, and one's audience. (Tracy, 2010, p. 841.) It is possible to practice self-reflexivity even before going into the field by being introspective, evaluating possible own biases and motivations, and questioning the appropriateness to examine the chosen sites or themes at any particular time. In addition to being honest and exposed through self-reflexivity, another practice of sincerity is transparency, which refers to honesty about the research process. (Tracy, 2010, p. 842.)

I have compared interviews with observations, compared what people say in private to what they say in public, checked for consistency, triangulated the views of the teachers, EPA project management and the curriculum team members and checked interviews against curricular documents and other written evidence that

can support what interview respondents report. (See also Patton, 2002, p. 559.) I have located evidence to document a theme in different sources of data by triangulating information and thus providing validity on my findings (see also Creswell, 2013, p. 251; Patton, 2002, p. 559).

3.12 Data Coding and Analysis

Data coding, or classification, was the first step of the analysis process in this study. It is a process of grouping the text, or visual data, into small sets of information, looking for evidence for the code from different databases being used in a study and then allocating a label to the code. (Creswell, 2013, p. 297.) I transcribed the dictaphone interviews, read through all field notes, semi-informal interviews, general statements, scrutinised curriculum documents and observation notes, analysed the general core content of these and begun to define the significant categories in the raw data by organising it into themes. I tied these to the research questions and looked for convergence – things that fit together. (Patton, 2002, p. 465.)

I used participant generated constructions (see also Patton, 2002, p. 468) to look for patterns, frequent consistencies in the interview statements, observations and field notes that I could sort into categories- or themes. I judged these according to *internal homogeneity* and *external heterogeneity*. (Guba 1978, p. 53; Patton 2002, p. 565.) Internal homogeneity meaning the extent to which the data, that belong in a certain theme, hold together in a meaningful manner and external heterogeneity meaning the extent to which differences among categories are bold and clear. I then examined the data for disagreement - by connecting themes and examining data that did not fit the prevailing themes, (Patton, 2002, p. 465) lastly I cross-classified different elements to find themes I have not yet identified.

3.13 Ethical Considerations

Ethical issues in a case study research are important categories to consider. Investigations should be carried out in ways designed to avoid risks to participants,

respondents and interviewers. Informing and protecting respondents is a key feature of a study. (Fowler, 2009, p. 164.) The founding principle was approaching everyone in an honest way with ongoing devotion to detail increasing the benefits of the research. (Fowler, 2009, p. 168.) I have attempted to be fully transparent, objective, approachable and honest to detail throughout this study. My ethical validation for this study includes prolonged engagement and persistent observation in the field by building a trust with all participants, learning the culture and checking for misinformation that may stem from misrepresentations introduced by me or the respondents. (Creswell, 2013, p. 250.) No participants are named in this research paper, all information is strictly confidential and interviews are anonymous. The school is referred to as an Emirati-Finnish fusion school, or the fusion school in this thesis. All participants are school staff and teachers who were pre-informed and all gave full acceptance to the study prior and throughout the process. The fusion school signed an ethics review committee approval for this research and were willing to participate fully from the beginning knowing that the study will support learning in the organisation.

3.14 Delimitations and Limitations of the Study

Various sources and resources to build on the strengths of each type of data collection have been used while minimising the flaw of single approach (see also Patton, 2002, p. 307). The participant observant method, reflective self-awareness, two years of naturalistic observations in the field, direct and personal contact and critical triangulation (see also Patton, 2002, p. 262) have several advantages and constitute for the delimitations in this case study. I am aware of certain limitations to the reliability and non-generalisability of the evaluation work, and that my personal direct involvement may affect the perception, so I have tried hard to diminish this fact, by having full support and confidence of my fellow colleagues over these years and by being truthfully open and honest in my analytical interpretations of the collected data without prejudice. This study is a true account of illuminating those practices that foster and support organisational learning in

fusion school environment and also clarify some of the inefficiencies limiting organisational learning in this environment.

4 DESCRIPTIVE NARRATIVE

“Education is the most powerful weapon, which you can use to change the world.”
— Nelson Mandela.

When the Emirati-Finnish Fusion School’s organisational structure was developed in 2010, one of the core elements considered necessary for the organisation was team orientated action approach and one of the teams in the center of the learning development was the curriculum team. The team membership in the curriculum team was entirely voluntary and initially constituted of three Emirati and three Finnish teachers, who all had some curricular development experience in the past. The team began as a small concentrated group of visionary and dedicated educationalists whose aim was to investigate and ponder the actual fusion elements and how to include these into the existing Abu Dhabi New School Model curriculum by adaptation and to transfer the school based curricula across the school. This brooding together made us comprehend the enormity of the task in hand and whether we would actually be successful in transferring this pedagogical knowledge and if so, would it remain to be permanent change in the Emirati School once team Finland would leave the country in 2015.

Central incidents in 2010 that transformed our thinking, created new knowledge and offered opportunities for professional development and organisational learning were the fusion curriculum innovation workshops relating to the vision, mission and strategies and the actual role of the curriculum in the operational practices of the fusion school. Firstly we all paid attention to the ADEC

New School Model (NSM) students' subject related skills and demonstrable assessable knowledge expected outcomes. (ADEC, 2009.)

The general response of all of the teaching staff to the overtly high expectations in the learning outcomes caused plenty of discussions and heated debates as the expectations were too high for the students in our school. The main reason for not achieving the expectations was that the students' English language abilities did not match the linguistic expectations in the Expected Learning Outcomes (later ELO). Most of the ELO began with the statement 'the student can explain', or 'the student can discuss'. This led to a disappointment and frustration among the teaching staff, however, we were equally amazed by the complacent attitude of some of the host teachers. Their general opinion was that 'we just teach what we can, what else can we do?' Alternatively, as one host teacher (who later on became an active member in the curriculum development team) stated: 'we *must* teach what ADEC tells us and *how* ADEC wants us to.' The respect and admiration these teachers have for ADEC and the educational reform is understandably immense. From meager educational beginnings the host teachers have witnessed impressive constructive changes and continuous resilient national development on the education sector and many of the teachers felt that they cannot challenge the local education authority or the system.

In October 2010 the curriculum team decided to draft a school based curriculum to *fit the school student cohort* and *to support the teachers in the teaching process*. The response from our host colleagues was initially overwhelmingly positive, nevertheless, hesitant, whether it would be possible to line the curriculum with ADEC statutory legal curricular requirements. There were many hesitations, questions and doubts from the host teachers and they had never written a school based curriculum before being not quite certain what does it entails and how is it possible. This was a very positive reaction, as the more questions and hesitations were raised, we knew that our colleagues were ready and eager to start learning the process of questioning the validity of mandates, actions and methods to critically improve the learning and teaching practices in the school and also to learn themselves about the role of the curriculum in schools in general.

Teachers began designing a school based curriculum with lowered expectations to the current student population. As curriculum is a working document, reflecting all that is taking place in the school, it was decided that the curriculum team, with the help of all teachers, would evaluate the outcomes semi-annually and make changes as appropriate to raise the expectations as the students skills improved. Team learning (Senge, 1990, p. 69) became one of the dynamic fast expanding elements during this case study. The main focus of the EPA project is to transfer class teacher skills, knowledge and methods to local teachers. This is done via a university based professional development program where the Finnish teachers act as mentors to support the studies and to model the teaching and learning in the class rooms in addition to other educational practices in the school. This is when the opportunity arose for an in depth research on organisational learning within the fusion school. There was an important need to know how much learning is taking place and where and how could we best facilitate this learning in practice. After receiving the fusion school Key Performance Indicators in the School Improvement Plan from ADEC in 2010 we had the opportunity to align them in the fusion school curricular operations as Value Drivers.

In the Emirati-Finnish fusion school both parties in the process must constantly listen, converse, accommodate and adapt to be able to progress and to 'fuse' their different viewpoints together in an effective and progressive way. Initially I believed that the challenging, questioning and inquiring that took unrelentingly place in the fusion school was a spinoff of the Finnish teachers who were Master's level graduates, or PhD research teachers and were not fully informed of their 'role' in the school. Many of the educational reform project programs were still in grass root level and continuously developing as we arrived in to UAE and this created robust daily deliberation about the situation among the Finns. This deliberation also transpired on our host colleagues, who equally eagerly questioned and inquired about various matters. 'Why are you here?' 'Why should we change anything?' 'How can we do it?' 'What is the purpose of changing

anything?' and so it on. It was obvious that a great deal of learning and dissemination of learning and knowledge was already taking place.

In the following year January 2011 many of the practices had evolved from experimental to being established and most dialogue and questioning had cemented into formal organisational operations in the fusion school. EPA project principles remained the same, but systems thinking was evident as strategies systematically advanced to meet the needs of the teachers, students and stakeholders. (Senge, 1990, p. 69.) One more source for exploring organisational learning in the school was the university based class teacher's pedagogical studies program offered to host teachers as further professional development which is the central part of the EPA project. As explained earlier, the fusion project sets out to develop a class teacher model by which to nurture child-focused learning; to create learner-centered environments; to employ integrated technologies for teaching and learning; to foster school, home and community stakeholder relationships; to maximize access to learning for children with differing abilities; and to embed language-supportive techniques in subject learning taught through English in the Emirate of Abu Dhabi. Professional development entails intensive, collaborative and evaluative work among PD-students and the rest of the teaching staff in the fusion school. The approach to professional development in the fusion school includes consultation, 12 Emirati teachers opted in to complete the 2-year long university PD-studies package and the ones that did not were constantly involved in improving own teaching practices through personal mentoring and were motivated to follow suite in the next cohort of PD-studies.

The Finnish teachers' style of open dialogue and arguments were at the outset uncommon to the host teachers. The Emirati cultural request of 'friendship before business', necessitated all teachers to befriend each other. Once this was established relational trust (Collinson & Cook, 2007, p. 157) started to grow that made organisational learning possible. The organisational structure in the school provided a platform for the teachers to work collaboratively together. Time tabled team-teaching sessions for the benefit of cross-curricular teaching and learning were established, class-teacher modelling to Emiratis from the Finnish teachers, teams

established for important aspects of the school operations - school and home communication, school improvement, advisory committee, learning support, curriculum adaptation, health and safety, student welfare, staff recreation, celebrations and green and sustainable learning environment. Every member of each team contributed towards collective learning opportunity. Teachers worked collegially and trusted one another building shared vision. (Senge, 1990, p. 69.)

Throughout the two year process of gathering various data, evidence suggest that there was a robust group of Model 1 learners (Argyris, 1982, p. 8) in the fusion school organisation, that surfaced in this research. In particular the governing variables concerning minimising the generation of negative feelings and its direct consequences in defensive forms rose to the surface among the teaching staff. In administrative level, the research detected the governing variable of rationality generating lack of freedom of choice, absence of internal commitment in the teachers and minimal risk taking by the leadership.

The aim in the fusion school and the curriculum was to achieve a common organisational vision, to work towards it as a committed and sentient effort. The actions in the fusion school's operational core, central in the EPA-operations, are based on systems thinking (Senge, 1990,p. 14) meaning, that it is building a new generation of educators in professional dialogue, learning together and growing together, not only in relation to the local colleagues, but also as a whole educational community. It's a process where professional discourses and viewpoints vary and occasional ' bumping ' occurs, however, diamonds are born only through firm constriction.

From the beginning of the development of the curricular fusion, during the workshops, meetings, debates and discussions with ADEC Headquarters, teacher training sessions in various curricular aspects, teachers professional development studies, administrative leadership, project management's innovation workshops and general daily working together, some organisational learning was evident. However, when asked the participants, if organisational learning was taking place, the answers were surprisingly hesitant; some did not really understand what

organisational learning is, some felt that 'others learn -not me' and many blamed the organisational environment on restricting the wider dissemination of learning in the school.

5 DATA ANALYSIS

I chose the qualitative research method, as my research is based on a two-year long ongoing case study. I began collecting qualitative research data in September 2010, familiarised myself with a holistic deductive design of naturalistic inquiry in the case analysis (Patton, 2002, p. 248) to illustrate theoretically, and as an ongoing empirical study as participant observer and researcher over two years, how organisational learning demonstrates in the fusion school. The research objective was to collect first hand data involving multiple sources of information, through continuous dialogue and discourse within the curriculum team members and the teaching and administration staff of the school. The objectives of the study, that provided direction for data collection and analysis included, preparation through document analysis, informal and semi-structured interviews, an ethno-historical account of categories (Patton, 2002, p. 583; Creswell, 2013, p. 97) contributing to the development of organisational learning in the curriculum development process, identifying, reviewing and summarising concepts in the literature that helped explain the organisational learning phenomenon, and generating from the data, in the ethno-historical account, a set of naturalistic generalisations (Stake, 1978, pp. 5-8) for organisational learning in our Emirati-Finnish fusion school curriculum development. I am focusing on the holistic purpose and the meaning of the phenomena, and to seek deeper and further knowledge and understanding of the organisational learning processes. In practice this means empirical deduction where observations are made according to the research outcome.

5.1 A Review of the Purpose of the Study

The purpose of this research was to discover: the expectations held in the fusion school in relation to organisational learning, how the organisational learning manifests in the curriculum development, what is the importance of the curriculum in relation to organisational learning and deepening the understanding of

organisational learning in general including how the school and the teachers may increase this knowledge through collaboration and participation in the school affairs.

This study addressed 'school leadership to standards, teachers to standards, curriculum to standards, facilities to standards' areas of ADEC goals and strategies and the implementation of ADEC strategic Plan 2009-2011: 'Migrate to the New School operating Model (NSM) in phases—with Cycle 1 - fully in place by 2013-14'. (ADEC, 2012, p. 4).

The research concerned the curricular fusion of Finnish experience in the NSM and is useful in providing ADEC information about the NSM implementation. It also provides to highlight excellent educational practice and promote organisational learning at school level, ensuring school leadership, teachers and curriculum to reach standards. The purpose has been to gather comprehensive, systematic and in-depth evidence about organisational learning in the curriculum development process (Patton, 2002, p. 447) to assist in the further curriculum development assuming direction for the best possible outcome, and most importantly, gather data for main stakeholders, or for any other party, who is interested in organisational learning in educational fusion process.

5.2 Overview of Procedures Used to Code and Analyse Data

Initially I searched the recorded data for stories comments and dialogue. I transcribed the interview replies and analysed the collected field data to find common categories and themes. Data coding was the first step of the analysis process in this study. I aggregated the data texts into categories of information, seeking evidence manually, by highlighting different concepts with different colours and then assigning a label to the colour code by using post-it-notes. (Creswell, 2013, p. 297.) I transcribed the dicta-phone interviews, read the field notes, curriculum documents and observation notes, analysed the general content of these and determined certain significant categories. I used participant generated

exchange (Patton, 2002, p. 468) to look for emergent patterns and themes. Some came up over and over again in different contexts and sometimes worded slightly differently, but meaning the same, and I organised these into themes. I tied these themes to the research questions and the supporting literature looking for convergence - things that fit together. (Patton, 2002, p. 465.) I judged these according to internal homogeneity and external heterogeneity. (Guba, 1978, p. 53.) I then examined the data for divergence - by bridging themes, surfacing and examination of data that did not fit the dominant themes, (Patton, 2002, p. 465) and finally, I cross-classified varied dimensions to find themes not yet identified.

5.3 Description of Categories Identified Through the Process

The descriptions of the identified 22 categories are listed here. The primary category is *trust between its members*. Reflection, sharing, division of work, personal orientation, hierarchy of authority, rules and regulations, organisational goals, continuous spiralling cycle, uncertainty, opposition, uncertainty of leadership, methods scrutiny, teams, new teacher recruitment - organisational memory importance, conflicts among staff members, personal development, inquiry, co-operation and truth and transparency and dialogue surface often.

I have further divided these categories into subsets under five themes, or themes that fit in with the interview questions: what is the nature of organisational learning and learning organisations as conveyed by the literature and in this schools setting? What are the expectations held in this School in relation to organisational learning in the school? How does the organisational learning manifest in the school's curriculum development? What is the importance of the curriculum in relation to organisational learning? The five themes I have identified are: 'providing for self-fulfillment', 'democratic principles', 'fostering inquiry', 'teacher in (ter) dependence' and 'individual orientation to community orientation' associated with theories of Systems Thinking (Senge, 1990) and the Use of Individual, Group and

System learning by Collinson and Cook (2007). These two theories will allow me to illustrate clearly the connection between the research questions and findings in the data linked to literature.

6 RESULTS (Analysis of Categories)

I revealed five distinct themes from the 22 categories exposed from various observed and recorded data in my analysis. I constructed a list of codes which served as common nominators. I was satisfied at this point that I could see clearly how to carve the narrative analysis by connecting these nominators to the organisational learning literature and research questions.

Providing for self-fulfilment

The research questions - 'how does the organisational learning manifest in the school's curriculum development', and 'what is the importance of the curriculum in relation to organisational learning' are both reflected in the staff's need for personal self-fulfilment. This is a distinctive theme which surfaced from the data. Of the 22 categories, trust between its members, reflection, sharing, division of work, personal orientation, personal development, inquiry, co-operation and truth and transparency and dialogue all echo self-fulfilment.

Aspects of the five dimensions that distinguish organisational learning according to Senge (1990, p. 69), personal mastery, mental models, building shared vision, team learning and systems thinking were detectable during the two year observation and recording period in the observable data. These dimensions are said to be converging to innovate learning in organisations and systems thinking as the fifth discipline fuse them into a coherent body of theory and practice. (Senge, 1990, p. 69.) People are agents and able to act upon the structures and systems of which they are a part. The "disciplines are in this way concerned with a shift of mind - from seeing trees to seeing woods, from seeing people as helpless reactors to seeing

them as active contributors shaping their own reality, from reacting plainly to the existing, as in single looped learning, to creating the future". (Senge, 1990, p. 69.) Personal mastery, according to Senge (1990, p. 141), is continually clarifying and deepening our personal vision, of focusing our energies, going beyond competence and skills and beyond spiritual opening and involving personal spiritual growth. (Senge, 1990, p. 141.)

Part of the interviewed host teachers stated that ADEC provided the school with a national curricular framework that they used. The Finnish teachers interviewed stated that they saw it not being a school curriculum, but a general framework for teaching with learning outcomes for subject teaching. The purpose of the EPA project is to model class teacher pedagogy and didactics in child-centred and holistic learning environment. As the fusion school began operations from ground zero, the idea of a school based curriculum to support the fusion objectives felt right. Initially the host country teachers did not see any reason why a school based curriculum should be developed and implemented when one can easily use the national core curriculum. Most found the curricular work tedious, time consuming and without meaning. Many local teachers reflected this in curriculum workshop meetings. For example: "Why can't we teach from ADEC curriculum, or MoD curriculum, it is all there what to teach?" Nevertheless, several curriculum workshops later, the definition for curriculum had unlocked among the host staff with the realisation that it is not only about what is taught, but it is about how the students are taught.

In the curriculum team data, it is evident, that two host teachers have joined the curriculum team as members and considered the work to be: "very important for our teaching." The majority of the host teachers specified that they have learned new skills and they have learned to view the role of the curriculum in a different light since the beginning of the school based curriculum development, which provided them a degree of self-fulfilment.

The data, from the curriculum meetings and teacher dialogue from many team meetings, reveal that after many co-operative deliberations, the staff wanted to

implement a Fusion School Curriculum Handbook, which would include all aspects of child-centred teaching methods and syllabi to age-appropriate and supportive learning environments. The Handbook was constructed as a team effort providing the fusion school members self-fulfilment through new knowledge and learning and organisational learning experiences, which are both key elements of organisational renewal required in leadership and learning opportunities at every level. (Collinson & Cook, 2007, p. 175.)

The leadership decided on organisational strategy. In the first year three assigned principals (one Finnish principal and two Emirati vice-principals) decided to lead through task orientated action approach and teams were developed to fulfil these tasks. In the documented staff meetings each teacher was expected to sign in one team according to their personal interest. In the interviews, when asked how successful this task orientated approach was, some teachers reported having complained it being a 'wasted time doing nothing in their team meetings' and some complained of a wider workload that 'exhausted'. These complaints to leadership did have a constructive effect, as in the second academic year the school changed direction and established 'organisational teams' linked to the school's operational plan. The leadership listened.

The transformation from a group teachers from same cultural background to a group being developed by sharing cultural thinking and behaviour is supported by the analysed data. Team-dynamics had become the focus for the teams' creativity and efficiency thus providing self-fulfilment to participants.

The Fusion School Curriculum Handbook was a working document during research period 2010-2012. This document was planned during the weekly curriculum team meetings and monthly workshops by the teachers for the teachers, to reflect ADEC beliefs, values and strategies and the current fusion methods and practices applied in the school. There is affirmative data evidence of curricular meetings with ADEC Headquarters in 2011 that took place in the fusion school to discuss Emirati-Finnish fusion school-based curriculum and assessment initiated by the fusion school staff. The host colleagues and Finnish experience drafted the school vision statement and considered the mission statements locally and

communally. 'Nurturing members' quest for meaningful values and goals, commitment and connections, and aspirations for growth (Collinson & Cook, 2007, p. 62) provided for self-fulfilment and self-fulfilment stimulated people to seek for challenges and self-development. The imbedded Professional Development programme for Emirati teachers, provided by the University of Jyväskylä Department of Education and supported by Finnish mentor colleagues was an opportunity for professional growth for all. This type of organisational renewal represents a major responsibility of executive leaders at the system level (Senge, 1990; Collinson & Cook, 2007), as leaders rely on members to identify and communicate learning needs at the individual, group, and organisational level and to detect norms, routines and structures that are hindering (Collinson & Cook, 2007, p.176), or need changing. In the data analysis, five of the staff interviewed, including three administration members, felt that the executive leadership was not present enough to support the fusion process during the initial two years.

The executive level leadership is provided by the EduCluster Finland Ltd. The role of ECF was to support the fusion from Finland by providing resources, continuous on-site project management, executive strategic leadership and also to liaison directly with ADEC organisational leadership and University of Jyväskylä Department of Education. Daft and Weick (1984, p. 285) present organisations as interpreting systems where learning is realised essentially as holistic organisational action, rather than individual processing. The external environment cannot be scanned, interpreted and learned effectively unless organisations align it with the internal environment, such as strategy, culture, structures, processes, and the people. (Daft & Weick, 1984, p. 285.)

What emerged from the data revealed that organisational goals were controlled by top leadership and this created uncertainty and opposition. Many of the participants interviewed felt that the leadership made decisions to the program without consulting the teachers, who conceived themselves as important part of the field work informers and wanted to be part of the decision making process, adding

an insight view to the university based EPA project. This view was shared among most of the Finnish teaching staff and three Emirati teachers interviewed.

This observation is slightly weakened by the voluntary EPA Consortium Reflection Team, who provided ECF some internal information how 'to see things from inside and to reform new patterns of behaviour', (EduClusterFinland, 2010) engaging the organisation as a whole and form an interdependent form of responsibility, which in turn could lead to organisational success. (Collinson & Cook, 2007, p.175). Organisational memory is embedded in the past learning and continuing opportunities for future organisational learning depend on socialising and retaining members in ways that value their well-being and promote self-fulfilment (Collinson & Cook, 2007, p.175) thus leading to organisational renewal at every level of the organisation. The fact, that some Finnish teachers left after a year's service, was felt as slowing down the process, as the new replacement teachers had to be invested in the process in a different culture, which was time consuming.

Learning organisations are open systems characterised as having transparent communications, collegial relationships among members, shared responsibility for teaching and learning, and the focus is on school renewal. (Senge, 1990; Collinson & Cook, 2007.) It therefore follows, that these organisations have people, who know the work and are capable of generating ideas for improvement, for example, where new rules and regulations are planned. Some elements of a learning organisation, or better learning community, can be detected in the fusion school data, but this is presently wedged in between the power struggle of 'who sets the rules' according to staff interviewed. The authoritative hierarchy of the administration and leadership in the school was mentioned often as hindering the teachers' self-fulfilment, desire to learn and decision making facilities.

Most host teachers agreed that they "have learned something", but many Finnish teachers thought that they "have not learned anything regarding education, just primarily to be patient and to work hard." This suggested that there may be a correlation between the teachers' educational degree and the type of learning taking place. The Finnish teachers are master's level educated teachers, who mentor the

local teachers, who mostly hold bachelor degrees. I will return to this detail in later chapter.

Democratic principles

The research question: What are the expectations held in this school in relation to organisational learning, analyses democratic principles. Democratic principles - truth and transparency, representation, vigorous discussion, freedom of speech, and heterogeneity act as a cornerstone of democratic organisations and societies. (Collinson & Cook, 2007, p. 62.) In the analysis process I identified a distinctive feature in the fusion school field work data, documented workshop data and in interviews; *trust between its members*. Other data categories, such as sharing, organisational goals, uncertainty, opposition, uncertainty of leadership, collaboration and dialogue are all related to democratic principles in the fusion school.

Organisational learning rests on the social system in which people interact to create their learning and learn from each other. According to Senge, (1990. p. 231) systems thinking entails strong leadership, where the leader must facilitate elements of renewal and learning, where the leader understands systems dynamics and the organisational strategies, but where the leader continues from here to design the mission, vision and values on how the people live and work. (Senge, 1990, pp. 341-344.) Learning also rests on interpersonal knowledge, communication skills, respect and compassion, optimism, conflict management and group processing skills. (Collinson & Cook, 2007, p. 62.) There was an unfortunate incident reported in the fusion school that can be described as bullying from teacher to other. Conflict management, as well as conflict communication skills, may promote organisational learning. This did transpire in the fusion school when colleagues took the initiative to stop the bully behaviour and protested powerfully leading to a discourse of what is the ethical role of teachers in supporting and caring for each other and what are the realities that make them happy and fulfilled in school. The principal's role was central in diffusing situations that could have jeopardised the

democracy of the school's learning climate. In real life, mutual relations among participants are complex mixtures of various emotions.

The analysed records had division of labour, personal orientation, hierarchy of authority, rules and regulations, and organisational goals as common factors. Most of the teachers in the fusion school were not happy about the rules and routines being changed, or division of work assignments dictated by administrative authority, such as the principals and cluster managers. Majority of the teachers seemed to feel that rules and routines were most efficient when decided in collaboration among the school stakeholders and that personal orientation and experience should be considered when assigning work assignments. Communities of practice have it all. (Wenger, 1998, p.77.)

The fusion school was in a culture of change and emotions seemed to run high. These represented differences of opinions, doubts and reservations and antagonism to new direction. Yet in some cases, and rather often, opposition was seen as a possible source of new ideas and breakthroughs. According to Fullan (2001, p. 74) the absence of conflict can be seen as sign of decay. The fusion school leadership was supporting collegial conflict management, hence an indication of progressive organisational learning created from a conflict resolution. Conflicts may actually act in favour of organisational learning in certain situations (Collinson & Cook, 2007, p. 165), as they can uncover the problems, barriers, and misunderstanding within the organisation.

Fostering inquiry

As stated earlier the EPA had internal voluntary reflection team to attend meetings of innovation in order to predict changes and make improvements to the existing framework. These were held as after-school, three-hour long, voluntary innovation workshops, where minutes and questions / dilemmas were posted to the staff beforehand and participants had their propositions ready to suggest in the meeting as part of the strategic learning and organisational operational principles. According to Pietersen (2002), Strategic Learning Cycle must be inbuilt into the organisation and *strategic innovation* should be considered more important than

haphazard actions and ad hoc creativities. It should be the fundamental core of organisational operational principles and offer systemic support in practical leadership processes. (Pietersen, 2002, p. 11.) Learn-execute-focus-align are how the four-step cycle may support leadership in an organisation.

As an EPA voluntary reflection team member I was able to record and observe this process from inside. The innovation workshops represented an example of direct and unintended inquiry fused to provide a way of embarking into inquiry where the entire organisation is analysing and participating in the change; this is fostering inquiry with collateral learning and is people focused thinking. (Collinson & Cook, 2007, p. 96.) Direct inquiry is the determined pursuit of feedback and testing of expectations, or assertions, which is a necessary part of organisational learning. Unintended inquiry is the purposeful appearance of implicit knowledge (e.g. insights, ideas, perceptions) to comprehend, or make sense of the environment and to inspire innovation. (Collinson & Cook 2007, p. 89.) This kind of inquiry is fundamental part of any organisational membership. The strategic learning cycle of inquiry facilitate the move towards the organisations aims and goals detecting errors and clarify problems within the organisation more rapidly, which was observed in operation in the EPA innovation meetings; the open-mindedness of the staff in the meetings, transparency and a genuine interest in what the fusion school was accomplishing, genuine desire to learn and share, and intellectual responsibility were some of those aspects that the fusion school community increased collateral learning in the organisation.

Collective Inquiry

Collective inquiry is the process of building shared knowledge by clarifying the questions that a group will explore together where problems and errors are detected and resolved. (Collinson & Cook, 2007 p. 94.) Teacher inquiry (action research), which is a powerful tool for professional development and school improvement (Collinson & Cook, 2007, p. 96), was observed daily in various meetings, classroom practice and in PD study group. I observed closely how the

ongoing university based PD study programme, facilitated by Finnish teacher mentors, created dialogue which is essential in collective inquiry in an environment categorised as a community of learners promoting meaning, interpretation, inquiry and understanding that leads to unremitting organisational improvement. (Collinson & Cook, 2007, p. 96.) Equality among the participants, empathic listening and the capacity to engage in dialogue and bring expectations into the open was evident in observations and developed during the research. (Collinson & Cook, 2007, p. 96.)

The research data also show that many of the Finnish teachers interviewed said that they didn't get responsible enough work assignments, were referred to as 'line-teachers' by the principal and were expected only to teach a class; which they felt was not what the fusion project was about and the purpose for employment in the EPA project. Some teachers said that they did not have intellectual safety and were ridiculed by other teachers and some complained about the way the teachers' professional development evaluations are carried out. One quote: "The principal spoke to me about her personal holiday and asked me if I am happy here in the UAE. We had a 15 minutes conversation and that was my personal development session gone." Another teacher lamented: "I had no developmental meeting but my results just went on the ADEC website, where I had been evaluated without my superior even consulting me." Another response from an Emirati teacher: "I feel that the principal is not aware, or interested in, what is going on in the classrooms. She never visits the teachers in the classrooms." These are just a small number of similar examples in the large database of teachers' views, which demonstrate that successful communication is often face-to face dialogue which represents two-way level communication instead of one-way hierarchical communication. (Collins and Cook, 2007, p.154.)

I observed direct dialogue in the fusion school where there is an element of vulnerability, even fear present. I observed and recorded a curriculum team meeting where one party refused to state an opinion, as long as there was a particular member present. Once the 'problematic' person left the room the dialogue continued. The information is still allowed to be passed on in writing but the

participants prefer not to face each other. It was a question of breaking the barriers of intellectual safety. The speaker did not feel equal in the dialogue. There is a great deal of social contact mediated through dialogue. Peter Senge, (1990, p. 227) sees dialogue as fundamental in clarifying common vision. When people talk about the vision, it provides clarity and when things are seen clearly, people get excited about them. Dialogue requests an organisational environment where people are sheltered sufficiently to say what's really on their minds and aren't afraid to expose their inexperience, or ask for help. (Collinson & Cook 2007, p.154.) This is an area that calls for further investigation in the fusion school in order to facilitate deeper organisational learning.

There is more to communication than just the words that are transported. Direct interpretations and instantaneous feedback speak for the benefit of direct dialogue. Worthy dialogue may actually change thinking. (Kikoski & Kikoski, 2004.)

From individual orientation to community orientation

Moving from individual to collective learning requires interpersonal trust among team members. When the acceptance of others, honesty and open-mindedness are consistent in the organisation it helps in constructing trust. Interpersonal, (relational) trust is created in daily social interactions and where expectations held for others are certified in action. (Bryk & Scneider, 2002, p. 136.) The fusion school host teachers with a strong interpersonal trust have a shared commitment to a common purpose. The common trust observed and evidenced in the school binds the staff together and facilitates collective decision making and open conversations. Three Finnish staff have noted, that to get into the Emirati teachers circle of trust was hard, but once in, it was permanent. Senge (1990, p. 236) emphasises dialogue and team learning in the five dimensions supporting organisational learning. Once this is established, the team is more able and tuned to create results that are in the interest of all of the members.

Many of the teachers indulge in professional development and in life-long learning. Some study courses in various fields of education in local universities to improve curricular subject knowledge, or they conduct research on some particular educational issue, such as a PhD. This is individual learning. Individual learning is beneficial for organisations, if they disseminate the knowledge held by individuals to collective force by group learning, or collateral learning situations. The data indicates that dissemination of learned knowledge across the organisation is not yet manifesting in the fusion school, on the contrary, some teachers feel that they have no opportunities to share what they have learned and reinforce their own learning. Schools that are community orientated foster organisational learning by collective inquiry and transparency. (Collinson & Cook, 2007, p. 98.) Organisations that are open-minded to alternative possibilities, listening to multiple viewpoints and share control of tasks and act collaboratively enrich themselves by having strong and capable workforce that is ready for continuous renewal and challenge resulting in an on-going renewal inside the organisation. The more often the cycle is repeated in the organisation, the better the outcome will be. Evidently there is a barrier somewhere in the fusion schools' organisational renewal as the learning is not cyclically shared among the rest of the organisation. Continuous on-going renewal is characteristic of truly adaptive organisation. (Pietersen, 2002, p. 9.)

I have read numerous curriculum development team minutes that record fusion discourse about creating opportunities for collegial- communal learning: cultural visits, staff get together, relaxation after work, visits to educational fairs, visits to each other classrooms etc. The school have timetabled some 'welcome classes' to model practises of class teaching. The 'welcome teachers' may suggest different approaches to learning or/and teaching and observers transfer approaches and practices back to their own classrooms. A desire for collegial interdependence seems to manifests in the fusion school and if accomplished will promote organisational learning. I recorded that one community cooking course and visiting the park with the pupils are both activities that are considered important in this school. When interviewed, the school staff is aware that busy time schedule may act against the organisational learning and separate, rather than unite. Team

teaching, unit meetings, team meetings all give opportunities for promoting organisational learning, but does not allow time for informal chat and friendship and passing on the 'silent information' albeit tacit knowledge. The aim for the interviewed teachers is to bridge the school administration and the teaching staff by organising occasional informal activities for all to break down the barriers in communication. The administrative communication in the school is informed to be old fashioned, unapproachable, hierarchical and rigid. All informants are hopeful that with time this barrier can be lifted.

Teacher in (ter)dependence

One of the research questions is "how does the organisational learning manifest in the school's curriculum development?" Curriculum development encompasses all that ensues in the fusion school. The Fusion School's Curricular Handbook developed jointly by the teachers with guidance from the curriculum team is continuously evaluated. It includes all aspects of school organisation from vision and mission statements and operational principles to teaching methods, child centred approach, learning environment to parental involvement.

A very important part of the curriculum development is the subject curricula; the outcomes, content and objectives; what is taught, how it is taught and what the learning outcome is. The curriculum team has spent time in adapting the Finnish pedagogic experience into the ADEC NSM subject curricula, including holistic methods of teaching and modified content to fit age-appropriate teaching and learning. Teachers' input was called in the curriculum workshops and a teamed effort through inquiry, dialogue, evidence building and collaboration was manifesting throughout this research. The organisational learning cycle in the fusion school represents a general systems model (Senge, 1990, p. 61) where external environment offers the input which is then processed through inquiry and the output reflects the actions that are taken. According to Argyris and Schön (1978) in single-loop learning the effect would be to fix the problem and don't think too much about it, however, the fusion school's approach is double-loop learning with

challenge to the traditional organisational norms, practices and assumptions in the NSM curriculum in order to find a fusion way of curricular practices that fits best in the Emirati-Finnish fusion school operations.

It is believed that in knowledge-based society teacher independence does not contribute to enhancing student learning, building the capacity of colleagues, or improving the organisation. (Collinson & Cook, 2007, p. 98.) Interdependence on the other hand is a relation between its members that each is mutually dependent on the others. This concept differs from a simple dependence relation, which implies that one member of the relationship can't function, or survive apart from the other (s). Teachers on the PD study used guided reflection procedure to develop their pedagogical practices. (Leijen et al, 2008, p. 316.) Guided reflection principles are effective in enabling student teachers to construct professional agency and gain knowledge and skills they need when they enter into the teacher profession. It emphasises student teacher's personal aims and goals of learning, interaction with others, spoken and written reflection, and time used for prolonged reflection, as in deuterolearning, which is learning about improving the learning system itself by reflection. (Argyris & Schön, 1978, pp. 20-21; 1996.) Essentially deuterolearning is learning how to learn. Effective learning also entail the possession of four different preferred manners of dealing with information processing: concrete experience, reflective observation, abstract conceptualisation and active experimentation. (Kolb & Fry, 1975, pp. 33-57.) The local PD students visited Finland and Finnish educational institutions at least twice during the program to acquire the concrete experience which to reflect upon. A learning style inventory (Kolb, 1976, pp. 21-31) was designed to place people on a line between concrete experience and abstract conceptualisation and active experimentation and reflective observation. These visits also strengthened the building of the shared vision, which is fundamental for any organisation. (Senge, 1990, p. 9.) Shared vision spreads via it's innate strength and improved clarity, enthusiasm and dedication to it nurtures the vision. (Senge, 1990, p. 227.)

7 DISCUSSION

I shall review the research literature pertinent to the 22 categories revealed by the data: *trust between its members, reflection, sharing, division of work, personal orientation, hierarchy of authority, rules and regulations, organisational goals, continuous spiralling cycle, uncertainty, opposition, uncertainty of leadership, methods scrutiny, teams, new teacher recruitment – organisational memory importance, conflicts among staff members, personal development, inquiry, co-operation and truth and transparency and dialogue* and the research question - what is the nature of organisational learning and learning organisations, as conveyed by the literature and in this fusion school setting, and validate correlations to the practices manifesting in the case study school.

According to Peter Senge (2003) the field of organisational learning is broad and multi-faceted. So many categories contribute to shifting management thinking and action over extended periods of time, that attributing too much to any one event is foolish. Starting from Argyris and Schön's (1978) radical core ideas we move on to viewing some of the later theories, which have had an impact on how we understand organisational learning and which also shed light on the phenomena of organisational learning in the Emirati-Finnish fusion school's curriculum development. Argyris and Schön (1975 and 1978) in an earlier theory of action perspective, give an explanation of the theory-in-action, espoused-theory-in-action, single-loop learning and double-loop learning frameworks that define manners of organisational learning and the methods how to achieve the best in terms of behavioural and cognitive change. The practices summarized above manifesting in the case study school clearly display elements that fit in to the framework of double loop learning. Kolb's and Fry's (1975) Experiential Learning Model (ELM) theory reflects on individual and group experiences and learning-from-doing. This particular theory and practice is used widely on adult education, informal education and lifelong learning and fits the case study phenomena, as a glove to a hand. Likewise to Argyris and Schön's (1975) theory, it relies on reflection from

experience, which is also a central element of the university PD studies through modeling.

Daft and Weick's (1984) *Toward a Model of Organisations as Interpretation Systems*, is a theoretical view of organisational learning as a comparative model of organisations as interpretation systems. It views the organisation as whole and the individuals as parts of the organisational whole, which interprets the environment. The model describes four interpretation modes: enacting, discovering, undirected viewing and conditional viewing. It is slightly more complicated, as it was developed for industry in mind, nonetheless, this theory joins in with the others to explain the main characteristic actions the organisation on all levels must take in order for organisational learning to take place. Peter Senge's (1990) systemic thinking and the five dimensions that distinguish learning organisations from more traditional organisations follow the mastery of certain basic disciplines, and that decision making in organisations can be impacted by the system's approach to interpreting the data. Looking closely at these five dimensions, similarities with the earlier theoreticians' views are detectable, which is not surprising, as Senge had studied Argyris and Schön and Kolb and Fry's theories prior to developing systemic thinking theory. In Collinson and Cook's (2007) more recent theory on organisational learning: improving learning, teaching, and leading in school systems, provide us with an insight and practical tools into what is organisational learning and how to foster it in schools. Collinson and Cook (2007) have referred to all of the earlier mentioned authors in their work. These theories are related in the organisational learning phenomena in the curriculum development in the fusion school.

Argyris & Schön's, (1978) theory of single-loop learning "generally involves becoming better at something that is already been done." (Collinson & Cook, 2007, p.19.) It does not involve changes in the system. There is no questioning, or inquiry about existing methods or frameworks, such as in the case of double-loop learning, which is usually more difficult to achieve in organisational learning. When our actions are intended to achieve certain consequences and to avoid conflict about the governing variables, a single loop learning cycle most commonly prevails.

However, if we take action to achieve certain consequences, but we also openly challenge the conflict and inquire and hence change the governing variables, both single loop and double loop learning cycles prevail. This principle applies not only to human personal behaviour, but also to organisational behaviours according to the two Models. There is clear evidence of double-loop learning manifesting in the fusion school curriculum development. Argyris and Schön (1978) linked closely inquiry and error detection and correction. Individuals collectively, via inquiry, detect errors and aim to correct them; which is what is taking place among the curriculum team members and other teachers and staff in the fusion school. An error is seen as a mismatch between plan or intention and what actually happened when either is implemented. (Argyris, 1999, p. xiii.) In the fusion school the mismatch between intention and outcome creates new learning, for example in planning the mismatch, the outcome directs future planning and possible further actions, which themselves create wider organisational learning.

Model II implementation and action designs situations, or environments, where participants can experience high personal connection. It functions by minimally protective interpersonal relations, team dynamics and learning-oriented norms (trust, individuality, open confrontation on difficult issues). In consequence it entails high freedom of choice and increased likelihood of double-loop learning. (Argyris et al. 1985) There are still fundamentals missing in the fusion school operational practices that would allow the free-flow of organisational learning. Organisational theory-in-use constantly created through individual inquiry is encrypted in private images and in public maps. These are the media of organisational learning (Argyris & Schön 1978, 16-17) that the fusion school leadership ought to harvest to gain better understanding on how to foster organisational learning within. The follow up for double-loop learning are the two models that define features of theories-in-use that either inhibit, or enhance double-loop learning and block organisational learning. (Argyris & Schön, 1996, p. xiii-xiv.)

The belief is that all people utilise a common-theory-in-use in problematic situations, which they call Model I. It can be said to inhibit double-loop learning.

Model 1, which illustrates how *single-loop learning* affects human actions are explained in table 2. The fusion school's organisation is based on dialogue and questioning, mutual trust and exploration. We can see in table 2 that, when teachers control the ownership of the task, are defensive and non-co-operative tasks are fulfilled with very little learning taking place; this is single loop learning. However, in table 3 Model 2 shows when teachers are less defensive, share and collaborate together in getting ideas and tasks completed leads to double loop learning and promotes organisational learning.

The fusion schools Operational Plan implementation is conducted by organisational teams, all teachers must belong in to one team and the team dynamics give direction to organisational learning. Henceforth we may conclude that there are elements of double loop learning manifesting in the fusion school, yet the methods and support pillars to foster continuous double looped organisational learning must be reinforced, and rethought by the leadership.

Kolb and Fry (1975) developed Experiential Learning Model (ELM) theory, which sees "learning as the process, whereby knowledge is created through the transformation of experience." (Kolb & Fry, 1975, p. 41.) Kolb and Fry (1975) argue that the learning cycle can begin at any one of the four points, but typically begins with a concrete experience - and that it should really be approached as a continuous spiral. The learning process can begin at any stage with a person carrying out a particular action and then seeing the effects of the action in this situation. Teachers' personal experiences shape the learning process through reflection. The four elements; concrete experience, observation and reflection, forming abstract concepts and testing new situations, are the essence of the spiral of learning. To explain the connection of the PD students learning and Kolb's experiential learning model, Kolb's experiential learning style theory is represented by a four stage learning cycle, in where the learners touch all the bases. Experiential learning uses the learners' own experiences and their reflections about these experiences. It is learner centred and holistic approach of addressing cognitive, emotional and the physical aspect of learners, and where people learn-by-doing. (Collinson & Cook, 2007, p. 49.)

In the experiential learning model the *educator* (teacher, coach or mentor) is the facilitator of a person's learning cycle. In the fusion school, the mentor and other teachers act as facilitators to help principals and other teaching professionals to reflect upon the theories-in-action. (Finger & Asun, 2000, p. 46.) The benefit of experiential learning model is as it is an effective educational method by engaging the learners in a very personal manner by assisting the learners to fulfil their personal learning needs, such as the PD programme. Experiential learning is about creating an experience where learning can be facilitated.

To construct well-crafted learning experiences for the Emirati colleagues the Finnish facilitators must be outstanding. The secret of good experiential learning lies in how the facilitator facilitates the learning process. In the fusion school the facilitators are all master's level educationalists with lengthy experience in the Finnish education system and pedagogical teacher guidance. They teach by their own expertise and experience, by personal mastery (Senge, 1990, p. 141) modelling good practice in their classrooms (experiential learning) and exemplifying the classroom teachers' PD-course syllabus. The learning process accommodates the whole learning wheel; from goal setting to experiencing and observing in person the Finnish educational setting, to reviewing and finally action planning in the Emirati teachers' own classroom. It is important for experiential learning that the PD-students are encouraged in a positive and enjoyable environment directly to involve themselves in the learning experiences in the classrooms so that they gain a better understanding of the new knowledge, understanding the practical effects and remember the information longer. Finally, before graduation the PD-students reflect on their learning by presenting their studies in a two-day long PD-seminar for the entire school. It enables the Emirati PD-students to learn new skills, new attitudes and entirely new ways of thinking and acting. In addition it provides the rest of the school with an insight on the benefits of professional development studies, learning in general and building knowledge creation within the fusion school setting.

All the teachers in the fusion school have varied recognisable learning styles which overlap. In efficient teamwork all of those must have room to flourish to escalate the organisational learning possibility. With reference to Howard Gardner's (1983, p. 4) Theory of Multiple Intelligences to foster organisational learning the fusion school needs to be mindful of teachers' different learning styles and by inquiry and dialogue enable a transfer within the experiential learning cycle from a dimension to another. Diverse learning styles and their overlap is acknowledged in the collegial and collaborative learning on organisational level. In a proactive forward looking innovative organisation as the fusion school the *converger, diverger, assimilator and accommodator and their overlap* (Kolb & Fry, 1975, pp. 33-57) collaborate hand in hand to maximise the organisational communal inquiry that may well lead the school to potential strengths.

There are two additional variables that similarly influence how organisations make sense of the environment and learn; these are strategy formulation and decision making. (Figure 5; Daft & Weick, 1984, p. 292.) In strategy formulation organisations vary from being prospectors with high initiative and the environment is seen as changing and full of opportunities, analysers with occasional innovation and a careful approach, defenders with little scanning and attention to maintain the internal environment rather than scanning the external or reactors to where there is no strategy and the organisations accept anything that comes along.

The fusion school's university based classroom teachers' professional development studies and curriculum sessions are based on the principles of learning by experience, by example, discourse, questioning, by trial and error, observations and by doing. The fusion school is a 'prospector' and 'analyser' in its strategy formulation and the interpretation process employed is an active systems analysis discovering through analysable environment. The nature of the fusion element in the school warrants constant change element in action and innovation with careful consideration on cultural and environmental categories. This means that the fusion organisation must constantly seek information from the environment it acts on and to analyze the relevance and usefulness of it by questioning, conversing, testing and adapting. (Daft & Weick, 1984, p. 286.) This is a school that

relentlessly work together in teams, in pairs, in team-teaching and in inter-curricular way. They compare and analyse everything. The fusion school is in an active enacting mode where the environment is considered analysable and where the fusion school invents its own environment and learns-by-doing. (Daft & Weick, 1984, p. 286.)

Working closely together creates communal inquiry where all the teachers question and evaluate practices, methods, mandates, frameworks and curricula which they work with. They also scrutinise each other and their communal behaviour. Commitment in inquiry creates collateral learning - nature of curiosity, tolerance, and veneration for evidence, critical thinking, and willingness to suspend judgement; all of which in return help people get better at inquiry. (Collinson and Cook, 2007, p. 61.) In Collinson and Cook's (2007) research there are six strategies which have potential to support organisational learning in schools: prioritising learning for all members, fostering inquiry, facilitating the sharing of knowledge, practising collegial relations, attending to human relationships and providing for members' self-fulfilment. (Collinson & Cook, 2007 p. 60.) I have connected some of these in the themes in my analysis.

Personal mastery exhibits in teachers' aspirations to modify their personal thinking about the education fusion practice, as all that was routine and customary in their scholastic rationale is not that anymore. Personal mastery according to Senge (1990, p.141) means continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively (*ibid.* p.7) it goes beyond competence and skills although it involves them. It goes beyond spiritual opening although it involves spiritual growth. (Senge, 1990, p. 141.) The characteristics of Finnish scholastic rationale and educational approaches require adaptation due to the cultural and religious constraints of the host society. It is impossible to 'transport' an education system to another country and culture. It needs to be fused and carefully adapted to the host environment. The Finnish teachers often remark on their changing view of the world. "I have learned so much tolerance and respect here. I would have never believed that there is so much

cheerful hospitality in here.” Another Finnish teacher said: “My ethical and moral standing has transformed due to living in this country and by working closely with our Muslim sisters”. “I can’t believe how much love and respect we have received in this culture. It is different to ours and it took a while to accept the laid back ‘Inshallah’ attitude, the smiles and coffee instead of well-founded compact and clear answers to questions, but now I can see the fundamental point in it. What’s the rush when the aim is to know each other and only then it is possible to successfully fuse our values and doctrines together?”

The core changes in many schools affect the division of labour i.e. how different responsibilities are allocated; to whom and on what foundation; and the outcome is affecting teachers’ person and personal self-fulfilment. This situation can also be seen in this fusion school researched. Nonetheless, schools are filled with people and people have feelings, thoughts and emotions. Frequently a particular *modus operandi* and *agreed* practices are rooted in a school's strategies and when deviation from the customary practices occur, it may lead teachers to labour as ‘endorsed duties’ without a sense of drive, or progress and with rebellious approach - for example accepting no additional duties or assignments. Subsequently mental models change and personal mastery is lost. (Senge, 1990, p. 9.) Decisions must be made on the basis of facts and not feelings and by ensuring equality in treatment that reflects rationality in organisations. Although hierarchy in authority increases vertical organisation, it also leads to decreasing communication. The case study data reveals significant lack of transparent communication between the teaching staff and administration. Information flow from one level to another may be blocked, or deceptive as the teachers are reluctant to transfer corrupt information upwards, which may jeopardize their jobs, so they only communicate the things they think their superiors want to hear. (Blau & Scot, 1962; Senge, 1990, p. 344.)

Ethical matters and relationship skills, which are part of emotional intelligence closely linked to successful organisational learning, (Fullan, 2001, p. 72) were examined to be the primary area of new learning among the Finnish teaching staff. In addition what used to be the norm in the Emirati teachers’ teaching practice is

continuously under scrutiny by teachers themselves, as their educational understandings change due to continuous university level professional development studies, visits to Finland to observe live educational practices, working closely and interacting with the Finnish teachers and adapting the fusion curricula together.

What is important to all of these teachers is the successful educational synthesis of these two countries inside the Emirati national domain. This takes precedence and creates personal mastery within the school staff. These educationalists from both countries are interconnected yet dissimilar. The development began by opening up mental models, which were deeply ingrained assumptions and generalisations, or even pictures or images, which influenced how they understood the world and how they took action. (Senge, 1990, p. 9.) Senge (1990) expresses the process as "the discipline of mental models starts with viewing inwards, learning to expose our internal pictures of the world, deliver them to the surface and analyse them carefully. The ability to carry on conversations where we learn to balance inquiry and defence, where people expose their own thinking effectively and make that thinking open to others". (Senge, 1990, p. 9.) For the participants in the study it all began from friendship and trust building, getting to know each other, trusting each other enough to communicate in an open and honest situation within a *'circle of trust'* and by committing to the shared vision of a successful Emirati-Finnish fusion school. Moving the organisation in the right direction entails fostering openness. (Senge, 1990, p. 273-286).

The actualisation of what the shared vision really constitutes of and how does it manifest was not flawless at the time of this study among some of the participants according to the interviews; "I don't know what they want us to do", "I would like to know what the reason why you are here is", "Why don't you just give us some Finnish books and curriculum and we work from these?", "I don't know what I can teach the local teachers". However, I believe that with future teamwork and open dialogue, including clarifying more of the content in the fusion school's new school based curriculum by training, and by providing relentless

language and pedagogical support, the understanding of the shared vision actualisation is accessible for all and will provide a supporting environment for further organisational learning.

The organisational structure in the fusion school has been team orientated from the start and has been built on strong conviction. The teams plan their monthly subject strategies together, integrate themes within subjects for the benefit of the students' learning, team-teach, buddy-mentor each other and also pull the activity teachers into this scheme. Teacher interdependence is appreciated. (Collinson & Cook, 2007, p. 98.) The unit teams have an important role in evaluating the curricula in relation to student attainment and achievement in the curriculum development. Each unit team have a duty to observe the Emirati-Finnish fusion school Curriculum Handbook, adhere to it and evaluate its effectiveness in the end of the year in annual curriculum assessment, these all constitute as organisational learning inducing elements.

The top priority of the fusion school is to succeed in fusing the Finnish pedagogic class teacher practices in to a very different culture and environment. Plenty of systemic preparation and creative analytical thought (Senge, 1990) had gone into the project before it even began, and during the project the main bulk of the innovative and strategic work has been done by the school itself by the teachers and the leadership. The fusion school's EPA-project has a project manager specifically to ensure that the strategic supporting elements of the business system are lined behind a preferred strategy. (Pietersen 2002 p.17.) According to the Strategic Learning theory the trick is to make key elements of the business system support each other in sustenance of the strategy. In the fusion school this is done by embedding the key performance indicators as value drivers in to the school's operational plan, new fusion curriculum handbook and strategic development. Pietersen (2002, p. 19) explains this process by thinking about the organisation as an ecosystem - a rainforest, or a desert oasis, which actually is an apt metaphor for the fusion school's location. "An ecosystem functions successfully only when its interdependent elements support one another. When any single element does not play its supporting role, or when the elements work against each other, the system

fails.” Elements of this failure can be seen in teachers’ dissatisfaction to hierarchical instruction, as the desire is for dialogue. Pietersen’s (2002, p. 19) theory provides the practical utensils of how executives and leaders could turn ideas into action. His theory will provide a useful tool for the fusion school future leadership to focus on the strategy of organisational learning and assist the principals in giving a practical outline for strategy creation.

8 CONCLUSIONS

I have provided evidence of organisational learning manifesting in the fusion school's curriculum development by extracting living examples from the collected data fitting the organisational learning theories I have explored. Senge's systems theory and Argyris and Schön's theories-in-action, single-loop learning and double-loop learning in the organisational learning, with regard to the systemic curriculum development is evident. Teachers' professional development training program in the case study school setting would be experiential learning as in Kolb's Experiential Learning Model (Kolb, 1976, pp. 21-31). Kolb's experiential learning style theory is represented by a four stage learning cycle, in which the learners touches all the bases and the learning cycle can begin at any one of four elements: concrete experience, observation and reflection, forming abstract concepts and testing new situations. This happened in the beginning of the curriculum team development and whole fusion school initial strategic operations. The fusion school learning cycle formed a continuous spiral where the learning process began at any particular stage carrying out a particular action such as discussion, questioning critical reflection, or PD training and then seeing the effects of the action in practice. (Kolb, 1976, pp. 21-31). To create a well-crafted learning experience there needs to be good facilitators. The Finns role in this project was mentoring and facilitating the organisational learning. According to Kolb, (1976, pp. 21-31) the secret of good experiential learning is in how the mentor facilitates the learning process.

Organisational learning involves behavioural changes and cognitive changes. I observed and recorded in curriculum team meetings, staff meetings and innovative workshops - new visions, understandings, cognitive maps and fundamentally new associations between the effectiveness of past actions through teachers' and staff critical reflection, which informed the decisions made about future actions. (Collinson & Cook, 2007, p. 31.) This concept is associated with higher level learning and double loop learning. (Argyris and Schön, 1978, pp. 2-3.) I observed and recorded the developing discovery that led to fusion school teachers'

better understanding of their role as practitioners and researchers. Teachers engaged in double-loop reflection in reflective learning experiences in their daily duties and this process enabled the fusion school to analyse their espoused theories and theories-in-use leading to improved understanding of where and how their practice needs to improve. (Shepherd, 2006, p. 333.) All fusion school staff, by subjecting accounts of their practice to critical reflective investigation in team meetings and workshops, were able to recognise the disagreement between what they espoused to practice and what they actually did. In doing this they placed themselves in an improved position to develop their work by taking action designed to correct the discrepancy (Argyris and Schön, 1978, pp. 2-3.) and continuing the learning process by further reflecting on the consequence those actions have on the students, the fusion organisation and themselves. (Shepherd, 2006, p. 334.) The process of engaging in critically reflective practice requires the practitioner to become a 'researcher in the practice context' (Schön, 1983, p. 68), which is what took place in the fusion school. The school is a community of learners that all carry out their own research in practice.

Curriculum is the central core, the satin ribbon to what schools are about as systemic organisations; including the insights, vision, strategies, methodology, didactics - practical implementation of learning and outcomes. It also entails that curriculum, as a working document in schools, is the school's action report and hence an important manuscript, which necessitates continuous environmental and inner scrutiny, collaborative dialogue and innovative changes. While the school evolves - the action report also changes. Curriculum development and adaptation in this fusion school is a long term commitment ensuring that the students, teachers and the entire organisation learn.

There is room for enhancement in the future to include elements of professional training for the facilitators of the learning process in the oncoming PD programs. The principals' role in fostering organisational learning in a school is dominant. There is a paradigm change in the field of education, which requires new leadership. This requires the principals to transform from managers to collegial

leaders. Human relationship is a critical component of the organisation. Under the new organisational perspective there is a rising interest in the concept of community instead of the individual. Dialogue, questioning, argument, advice, and collective decision making are encouraged in a learning community and the principals should support the teachers to work and learn together, that way they will learn the specific skills to facilitate team work. This applies directly to this fusion school's organisational learning environment.

Teachers must be especially strong on optimism and stress management, which are one of the five realms of emotional intelligence, and teachers who are rigid and lacking in impulse control are ineffective. (Stein & Book, 2000; Fullan, 2001, p. 72.) This is closely linked to relationships, which seem to be everything in organisations. Emotional intelligence can be learned and the fusion school teachers can improve their EQ. Equally to be an effective leader the principal of the fusion school must also work on their own and others' emotional development. (Stein & Book, 2000; Fullan, 2001, p. 72.)

Teachers worked collegially and trusted one another. This offered an opportunity to tacit learning experiences - tacit learning frequently occurs through friendships, networks, inquiry, teamwork, feedback, written information, workshops, training sessions, meetings and in signing up new participants. (Collinson and Cook, 2007, p. 61.) Trust seems to be a key word in human relationship building and in organisational success. Not only should the principals of the fusion school support the teachers to work and learn together, but the teachers must equally support the principals in working and learning within the school teams. In a forward reaching school where everyone works as a team within a circle of trust and where the staff support the leadership, organisational learning will foster. This is an element that is not yet fully implemented in the fusion school. Two out of three of the interviewed staff stated that "There is an element of trust in in the school, yet it does not reach across the entire school community. This causes friction among teachers and in administration, and hinders organisational learning due to conflicts that arise on personal level affecting teamwork and collaboration." Learning creates equals, not subordinates. In this regard collaborative learning may

contribute to shared governance and shared governance will encourage learning. (Dixon, (1999) in Björk (2010).

The fusion school has a strong PD program for teachers, however, the study firmly supports an argument that further professional development in strategic collegial planning and implementation, relationship building and in pedagogic leadership is recommendable for the staff - school leaders, administration, the curriculum team members and teaching staff - in order to move away from the phase of functional individualism in learning organisation to reach fully professional learning organisation phase, where multi-skilled people are connected to each other and other organisations at the very edge of development, creating new knowledge and new practices. (Alava, 2010.)

Co-operation, dialogue, interdependence, self-fulfillment in professionals' role in the organisation, shared learning opportunities and relational trust (Collinson & Cook, 2007, p. 157) identified are recommended to continue in a dynamic manner in the fusion school and to extend to the wider organisation that includes the organisation stakeholders, decision makers, project management and the University of Jyväskylä in actively developing and exploring the opportunities for organisational learning in the fusion school operations in the future. These are also strategies that should be considered by any principal, or Headteacher taking on a new school, or transforming a school. The equilibrium and balance must remain in order for the school to be able to apply organisational learning principles at work. Teachers seek stimulating challenges and they are all intrinsically motivated. They need meaningful work assignments, safe working climate, the respect of each other and developmental paths in their role, as efficient and valued members of the organisation. "Learning to see the structures within, which the members operate, begins a process of freeing them from previously unforeseen forces and ultimately mastering the capacity building of members on a continuing basis". (Collinson & Cook, 2007, p. 62.) Retaining the organisation's existing members is seen equally central to the organisational renewal process, as is ensuring that individuals find self-fulfillment in their work, (Collinson & Cook, 2007, p. 62)

are both important leadership assignments. This is one of the major concerns of the fusion school staff, as the Finnish teachers are recruited on annual basis, and many left after their first year. This had a knock-back effect on the organisational renewal and school climate. An organisation that offers possibilities for growth and collaborative interdependent learning opportunities for employees, must also ensure that the primary values of democracy prevails, such as is nurturing the well-being and capacity of the employees. (Collinson & Cook, 2007, p. 62.)

Change always involves some resistance and some accommodation. The shift to a knowledge-based society underscores the importance of systemic thinking in creating and embedding new knowledge and understandings. (Collinson & Cook, 2007, p. 5.) By using systemic thinking leaders and members of the organisation can begin to better gauge different relationships, patterns and correlations occurring within the organisation. (Collinson & Cook, 2007, p. 6.) Is it then accurate to observe that systemic thinking may be essential for organisational learning? Certainly understanding theories behind actions will definitely open up the entire big picture of learning within the organisation and be an invaluable aid in facilitating change elements in schools that are going through transitional periods.

The operational executive company of ECF in the fusion school has systemic approach to the EPA-project with the 'new class teacher school blueprint through evidence base' construction. Quality assurance, formative hands-on evaluation, transparency through evidence base system reporting and the key performance indicators are interconnected by the systemic approach to areas of : ADEC strategic goals, change facilitation (transforming school culture, supporting leadership and learning environments), professional development (competence based professional development of teachers and principals) and community outreach that means engaging community, parents and stakeholders in the fusion school development. (© ECF, 2012). This has not filtered through yet on the leadership side and the teachers are expecting to see more of principal training and leadership strategies that support the organisational learning principles in the Emirati-Finnish fusion school.

The ADEC and EPA agreed key performance indicators to measure this fusion school's productivity and success have been imbedded in the fusion school's own school based curriculum as *value drivers*. These value drivers were agreed in partnership with ADEC headquarters school operations development division and each value driver is actively developed by all the staff in the fusion school development operations via organisational teams. They are: new technologies applied in education, age-appropriate activities and teaching strategies, teachers' professional growth, curricular adaptation, communities of learning and integrating content and language learning in teaching. "These value drivers are nurturing systemic success in this fusion school operations, as they are inter-linked and often inter-dependent research-driven applications, enabling the school to develop as world-class learning environment constantly evolving through the Emirati-Finnish pedagogic fusion partnership 'energised through co-operation, collaboration and creativity.'" (©ECF, 2012.)

The fusion school is focusing on the value drivers conscientiously via the organisational developmental teams and the teams indulge in daily inquiry within the curriculum development and strategic planning. The administrative staff have regular meetings, where they meet the Unit- and other team leaders, in inquiry based decision making or planning. The curriculum team fosters organisational learning by innovative workshops and curricular adaptation, which clarify the role and areas of the curriculum for the teaching and administrative staff. The education authority is seeking data continuously from the school regarding performance, strategies, planning and development in order to improve the system wide NSM curriculum implementation. However, shared understandings are built by sharing thoughts, practices, perceptions, experiences and by transparent actions and questioning. This is mainly facilitated in the fusion school by weekly whole school meetings, team- and unit meetings and in professional development platform.

There is a sophisticated systemic educational model in place, which moves the fusion forward; for it to be truly successful and implanted in the host culture the leadership is obliged to deepen understanding of the collaborative and

interdependent fundamentals within organisational learning. The fusion element of Emirati and Finnish experience in the school brings about a constant vacuum of knowledge transfer and sharing. Nothing should be taken for granted. Most fusion school staff has different educational backgrounds, different cultural, traditional and religious experiences and constraints, to fully adopt relational trust among colleagues, (Collinson & Cook, 2007, p. 157) nevertheless, they seem to share the same fusion school vision and thrive toward reaching it. This necessitates for everyone in the fusion school, from top leadership to support staff, to remain conscientiously open, adaptable and enthusiastic to learn new concepts and pedagogical practises collectively. The organisation as whole, and the individuals as parts of the organisational whole that interpret the environment and the information in it, share a perception and a cognitive map among the people, who create the interpretation system. (Daft & Weick, 1984, pp. 284-295.) Interpretation is the process, through which information is given meaning and actions are chosen on the organisational level, explaining the main characteristic actions the organisation must take in order for organisational learning to take place. It also explains some of the interpretation errors that are exhibiting within this case study school.

Naturalistic Generalisations and Propositions:

The greater the principal's reliance on management oriented patterns of interaction with teachers and strategy building, the less likely positive interpersonal relationships will be established.

The weaker interpersonal relationships, the less likely the organisational learning capacity of teachers will be developed.

I will identify some lines of future inquiry that emerged during the course of this study. The definition of organisational learning by Collinson and Cook's (2007) is 'the deliberate use of individual, group and system learning to embed new thinking and practices that continuously renew and transform the organisation in ways that support shared aims.' (Collinson & Cook, 2007, p. 13.) Organisational learning is deeply involved in individual learning and the sharing of this knowledge and those

skills in the workplace. It is clearly evident, that there is abundant individual learning taking place in the fusion school and some opportunities exist for sharing, but in order for learning to be organisational, it must be distributed and transferred into the rest of the fusion school. This is not yet comprehensively manifesting in the case study Emirati-Finnish fusion school.

I have presented analytical research findings firmly based on data collected, that point toward that the scholarly knowledge is not transferring across the fusion school for several reasons. Collinson and Cook (2007) nominated six strategies, or key responsibilities, for a good leader in carrying out organisational learning in the knowledge-based organisation: prioritising learning for all members, fostering inquiry, facilitating the sharing of knowledge, practising collegial relations, attending to human relationships and providing for members' self-fulfilment. (Collinson & Cook, 2007 p. 60.)

In promoting organisational learning human relationship is a critical component of the organisation. Under the new organisational perspective there is a rising interest in the concept of community instead of individual. Dialogue, questioning, argument, advice, and collective decision making are encouraged in a learning community. Principal should be able to assist the staff and teachers to work and learn together. Trust is the other key word in the human relationship building in the accomplishment of an organisation. "Organisational factors that foster relational trust include principal leadership, small school size, stable school communities, and voluntary association." (Bryk & Schneider, 2003, pp. 40-45). Relational trust is the driving notion referring to the trust in relationships that are based on many factors, including respect, personal regard, competence, and personal integrity. (Bryk & Schneider, 2003, pp. 40-45). These can be explained as enabling conditions at an individual and an organisational level. If the principal fosters social discourse across the school community, that is genuinely listening and valuing the opinions of others, mutual respect can be established. In return the willingness of all members of a school community to go the extra mile beyond the formal requirements of a job definition, or a contract, denotes personal regard. (Bryk

& Schneider, 2003, pp. 40–45.) Principal leadership is vital in organisational learning for establishing both respect and personal regard by acknowledging personal and others' vulnerabilities and by modeling active listening. (Bryk & Schneider, 2003, pp. 40–45.) Peter Senge (1990) has identified five dimensions that support organisational learning, of which systems thinking is the core pillar and which deeply involves dialogue as the essence of systems thinking. The leader, in this case the principal of the fusion school, is the designer, guide and host of all learning taking place in the fusion school. When the principal understands the dimensions of his/her actions and systematically imposes leadership fostering the five distinguished dimensions of organisational learning, the fusion school can become a learning organisation.

Organisational learning and renewal calls for a systematic reform. Real organisational learning only happens when the teachers are fully involved in the various learning processes and the principal acts as proper facilitator for the knowledge dissemination allowing these fostering elements. As the principal is the key agent in facilitating organisational learning in a school, it is strongly recommended that the principal receive further professional training, in facilitating organisational learning and to transform from a manager to collegial leader, who recognises and is able to nurture fundamentals in place that support organisational learning.

REFERENCES

- Abu Dhabi Education Council, (2009). *Strategic Plan for P-12 Education (2009-2018)*, copyright Abu Dhabi Education Council, UAE.
- Abu Dhabi Education Council, (2012). *Strategic Plan for P-12 Education (2009-2011)*, copyright Abu Dhabi Education Council, UAE.
- Alava, J. (2010), Master of Business Administration lecture notes. University of Jyväskylä Press.
- Al Fahim, M. (1995), *From Rags to Riches, a Story of Abu Dhabi*, London: London Centre of Arab Studies.
- Anderman, E. (2009). Overview of research methods in education, *Education.com*, 2317 Broadway Street, St 200, Redwood City, CA 94063.
- Argyris, C. (1999). *On Organisational Learning*. New York: John Wiley & Sons.
- Argyris, C. (1982). *Reasoning, Learning, and Action: Individual and Organisational*. San Francisco: Jossey-Bass.
- Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action Science: Concepts, Methods, and Skills for Research and Intervention*, San Francisco: Jossey-Bass.
- Argyris, C., & Schön, D. A. (1974). *Theory in Practice: Increasing Professional Effectiveness*. San Francisco: Jossey-Bass.
- Argyris, C., & Schön, D. (1978). *Organisational learning: A theory of action perspective*, Reading, Mass: Addison Wesley.
- Argyris, C., & Schön, D. (1996). *Organisational learning II: Theory, method and practice*, Reading, Mass: Addison Wesley.
- Blau, P.M. & Scott, W.R., (1962). *Formal Organisations*, CA: Chandler, pp. 194-221.
- Björk, L. (2000). The transformative role of school superintendents: creating a community of learners, in P. Short and J. Scribner (Eds.), *Case studies on Superintendence*. Lancaster, PA: Technomic Publishing co. pp. 41-60.
- Björk, L. (2006), Social dimensions of public relations. In T. Kowalski, (ed.), *Public relations in schools*, 4th edition, Abstracted from P. Chance and L. Björk (2006), Upper Saddle River, New Jersey: Merrill-Prentice Hall.
- Buber, M. (1937 reprinted 2010). *I-and-Thou*. Copyright. CT: Martino Publishing.

- Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A Core Resource for Improvement*. New York, NY: Russell Sage Foundation.
- Bryk, A., & Schneider, B. (2003). Trust in Schools: A Core Resource for School Reform. *Educational Leadership*, 60(6), 40–45.
- Collinson, T., & Cook, T. F. (2007). *Organisational Learning: Improving Learning, Teaching, and Leading in School Systems*. Thousand Oaks, CA: Sage Publications.
- Coppieters, P. (2005). Turning schools into learning organisations. *European Journal of Teacher Education*, 28 (2), pp. 129-139.
- Creswell, J.W. (2013). *Qualitative inquiry & research design: choosing among five approaches*. 3rd edition, CA: Sage Publications.
- Daft, R. L., & Weick, K. E. (1984). Toward a Model of Organisations as Interpretation Systems. *Academy of Management Review*, 9 (2), pp. 284-295.
- EduClusterFinland, (2010). *Innovation paper 2012*. ©EduCluster Finland Ltd, Jyväskylä.
- Easterby-Smith, M. And Lyles, M. (2003, 2005). *Handbook of Organisational Learning and Knowledge Management*. MA, USA. Blackwell Publishing.
- Finger, M., & Asún, M. (2000). *Adult Education at the Crossroads. Learning our way out*. London: Zed Books.
- Forrest, C. (2004). Kolb's Learning Cycle, in *Train the Trainer Issue 12*. UK: Fenman
- Fowler Jr., F.J. (2009). *Survey Research Methods*. 4th edition. London: Sage Publications.
- Fraenkel, J.R., & Wallen, N.E. (1996). *How to Design and Evaluate Research in Education* (3rd ed.). New York: McGraw-Hill
- Fullan, M.G. (2001). *Leading in a Culture of Change*. CA: Jossey Bass
- Gardner, H. (1983). *Frames of Mind. The Theory of Multiple Intelligences*. New York: Basic Books.
- Guba, E. G. (1978). *Toward a Narrative of Naturalistic Inquiry in Educational Evaluation*. LA: University of California Press.
- Holroyd, J. (2012). *Improving Personal and Organisational Performance in Social Work*. London: Sage Publications.
- Kelly, C. (1997). *TESL Journal*, Vol. III, No. 9.
- Kolb, D. A. (1976). *The Learning Style Inventory: Technical Manual*, Boston, Mass: McBer.
- Kolb, D. A. (1984). *Experiential Learning*. Englewood Cliffs, NJ: Prentice-Hall.
- Kolb, D. A., & Fry, R. (1975). Towards an applied theory of experiential learning. In C. Cooper (ed.) *Theories of Group Process*, London: John Wiley.

- LeCompte, M. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, Vol. 52, No. 1, pp. 31-60.
- Leijen, Ä., Allas, R., Toom, A., Husu, J., Marcos, J., Meijer, P., Knezic, D., Pedaste, M. and Krull, E. (2014) Guided reflection for supporting the development of student teachers' practical knowledge. *Procedia - Social and Behavioral Sciences* 112, 314 – 322.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- McKernan, J. (1991). *Curriculum Action Research. A Handbook of Methods and Resources for the Reflective Practitioner*. London: Kogan Page.
- Miles, M.B. & Huberman, M. (1984) *Qualitative Data Analysis*. Beverly Hills, CA: Sage.
- Murphy, J. (2005). *Connecting Teacher Leadership and School Improvement*. Thousand Oaks, CA: Corwin Press.
- Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods. 3rd edition*, CA: Sage Publications.
- Pietersen, W. (2002). *Reinventing Strategy: Using Strategic Learning to Create and Sustain Breakthrough Performance*. New York: John Wiley & Sons.
- Priestley, D. (2015). *Experiential Learning*. Available at <http://www.ventureteambuilding.co.uk/author/ventureteam>
- Reeves, J. (2011). *Professional Learning as Relational Practice*. New York: Springer.
- Schön, D. A. (1983). *The Reflective Practitioner: How professionals think in action*. New York, Basic Books.
- Schön, D. A. (1987). *Educating The Reflective Practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Senge, P. M. (1990). *The Fifth Discipline. The art and practice of the learning organisation*, London: Random House.
- Senge, P.M (2003) 'Taking Personal Change Seriously: The Impact of "Organisational Learning" on Management Practice' *The Academy of Management Executive* (1993-2005) Vol. 17, No. 2 pp. 47-50.
- Shepherd, M. (2006). 'Using a learning journal to improve professional practice: a journey of personal and professional self-discovery', *Reflective Practice*, 7:3, pp. 333-348.
- Stake R.E. (1978). The case study method in social inquiry *Educational Researcher*, 7(2), 5-8.
- Tennant, M. (1997). *Psychology and Adult Learning 2e*, London: Routledge.

The 21st Century Skills Education & Competitiveness a Resource and Policy Guide (2008).

AZ: Partnership for 21st Century Skills

Tracy, S.J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry*, 16, pp. 837-851.

Zollo, Maurizio, and Sidney G. Winter. ‘Deliberate Learning and the Evolution of Dynamic Capabilities’. *Organization Science* 13, no. 3 (2002): pp. 339–344.

Wenger, E. (1998). *Communities of Practice*, New York: Cambridge University Press.

APPENDICES

1. Research Timeline
2. Research Instruments for Data Analysis
3. Research Instrument for Interview Guidance
4. Research Instrument for Individual Interviews
5. Research Consent Form
6. Research Study Approval Letter

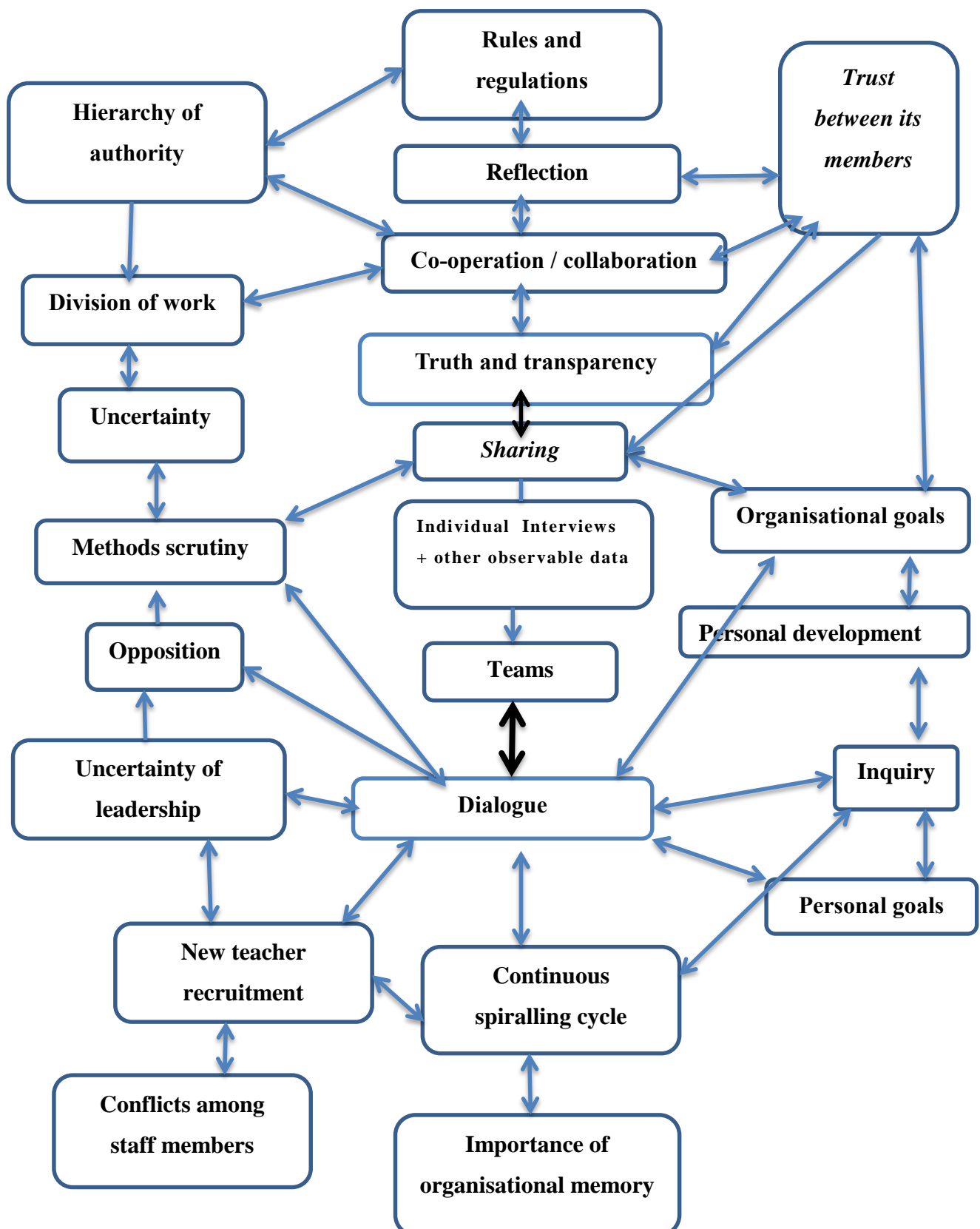
APPENDIX 1: RESEARCH TIMELINE

The timeline of main incidents and milestones taking place in the curriculum development of the Emirati-Finnish fusion school during the time 2010 to 2012.

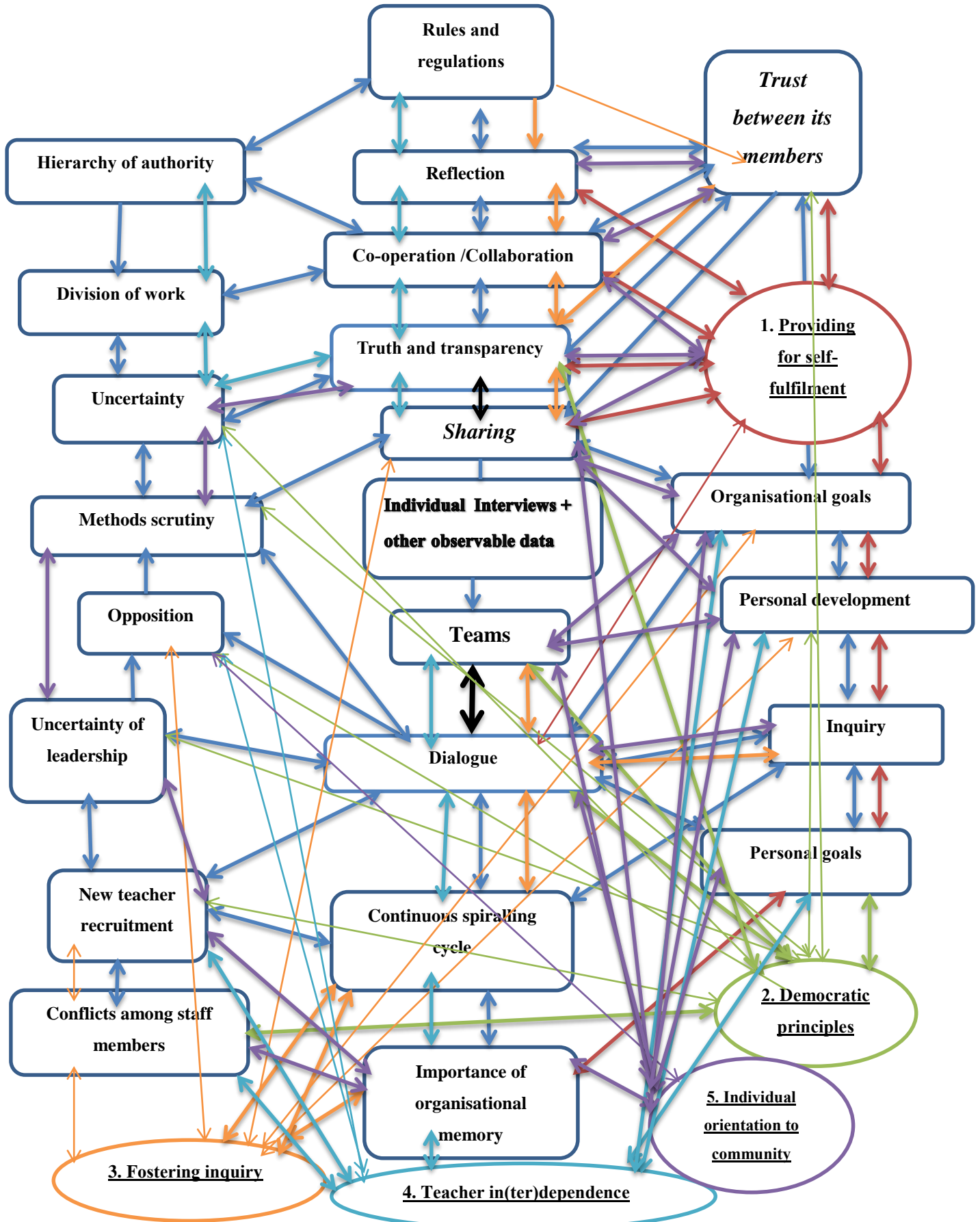
MILESTONE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR
	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Curriculum Team established									x			
Workshops: 'what's curriculum?' begun									x	x		
Survey Dissemination											x	
Vision workshop												x
Mission statements												x
MILESTONE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR
	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Subject curricular drafts ready					x							
Value Drivers & the curriculum											x	
MILESTONE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR	YR
	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Workshop with ADEC reps.		x										
Contents writing					x							
Survey Dissemination						x						
Data collection complete							x					

APPENDIX 2a: RESEARCH INSTRUMENTS FOR DATA ANALYSES

The 22 identified categories from the surveyed data:



APPENDIX 2b: RESEARCH DATA ANALYSIS



Appendix 2 explained.

I identified five colour coded themes from the 22 categories. I judged these according to internal homogeneity and external heterogeneity. (Guba 1978, p. 53; Patton 2002, p. 565.) Internal homogeneity meaning the extent to which the data that belong in a certain theme hold together in a meaningful manner and external heterogeneity meaning the extent to which differences among categories are bold and clear. I then examined the data for disagreement by connecting themes and examining data that did not fit the prevailing themes (Patton, 2002, p. 465) and lastly I cross-classified different elements to find themes I have not yet identified.

APPENDIX 3: RESEARCH INSTRUMENT FOR INTERVIEW GUIDANCE

CURRICULUM TEAM 2011-2012

May 2012-05-03

Interview questions guide

The curriculum team has in communication with other teachers of the school developed our school's own curriculum. Now it is time to reflect on what we as a team have accomplished. As you are all aware I am also writing my Masters of Educational Leadership and MBA dissertation on the theme of 'Organisational Learning in Emirati-Finnish Curriculum Development'. I would like to have your opinions and views on 'learning' taking place in our curricular work. By answering these questions you will automatically give consent to this data to be used in my thesis.

Attached are some interview questions so you may prepare yourself on what we are going to discuss regarding the curriculum process. Please answer the best you can, with examples as you find suitable.

Thanking you for the excellent work done and dedication to our continuous work on our own curriculum!

With best regards, *Heli Laiho-Murdoch*, Curriculum Chairperson

APPENDIX 4: RESEARCH INSTRUMENT FOR INDIVIDUAL INTERVIEWS

Interview questions

(This interview is strictly confidential, anonymous and may be terminated at any time by the interviewed)

I will illustrate theoretically and as an ongoing empirical study over two years how organisational learning manifests in one school's curriculum development, and hence the whole school, in the Emirati-Finnish educational fusion process. I have four major research questions.

What is the nature of organisational learning and learning organisations as conveyed by the literature and in this schools setting?

What are the expectations held in this School in relation to organisational learning in the school?

How does the organisational learning manifest in the school's curriculum development? What is the importance of the curriculum in relation to organisational learning?

1. What is the nature of organisational learning?

What does the term 'organisational learning' mean to you?

Which organisational learning theories are you familiar with?

Could you open up the terms: Single loop learning Double loop learning Team dynamics and Strategic learning cycle?

What kind of learning is important in schools and organisations?

How would you define learning in this school's setting?

2. What are the expectations held in this School in relation to organisational learning in the school among staff?

How is organisational learning taking place in this school during the EPA-project?

What measures have been put in place to ensure organisational learning in the EPA-project?

3. How could the organisational learning manifest in the school's curriculum development?

What is the role of the curriculum in this school?

In what means is the curriculum accessible for all?

Who is responsible for the curriculum development?

What does the process of developing and reviewing the curriculum entail?

Who is involved?

How do you collaborate or cooperate with anyone in the process?

4. What is the importance of the curriculum in relation to organisational learning?

How do you see the curriculum enhancing organisational learning across the school?

Have you noticed anything specific regarding this interview that you want to mention? Thank you for your time

APPENDIX 6: CONSENT FORMS

ADEC consent for to conduct Master's Degree research



Date: 20/5/2012

التاريخ: 2012/5/20

To Principal of the Private Schools

السادة/ مدراء المدارس الخاصة

الموضوع: تسهيل مهمة باحثين

I request you to kindly allow the researcher **Heli Laiho-Murdoch**, to complete her study on: "Observations and findings of organizational learning manifesting in the curriculum development of an Emirati-Finnish fusion school".

يطيب لنا أن نهديكم أطيب التحيات. ونود إعلامكم بموافقة مجلس أبوظبي للتعليم على موضوع الدراسة التي ستجريها الباحثة / **Heli Laiho-Murdoch** ، بعنوان: "Observations and findings of organizational learning manifesting in the curriculum development of an Emirati-Finnish fusion school".

Yours respectfully,

لذا، يرجى التكرم بتسهيل مهمة الباحثة ومساعدتها على إجراء الدراسة المشار إليه.



Brian Fox
Division Manager of Licensing & Accreditation

براين فوكس
مدير إدارة التراخيص والاعتماد

شاكركم لكم حسن تعاونكم

APPENDIX 7: APPROVAL LETTER

Research Approval letter

(Copy of this letter was signed and stamped by the fusion school and sent to ADEC offices, where it can be found)

To:

Abu Dhabi Education Council

Office of Research

PO Box 36005

Abu Dhabi, UAE

Phone +971.02.615.0000

Email: research@adec.ac.ae

EDUCATION RESEARCH APPROVALS

Ethics review committee approval letter from Emirati-Finnish Fusion School

For: MBA and Masters in Educational Leadership thesis:

*'Organisational Learning in the Emirati-Finnish Fusion School's
Curriculum Development.'*

Researcher: Heli Laiho-Murdoch, teacher in Emirati-Finnish Fusion School.

We the undersigned approve to collaborate with Heli Laiho-Murdoch in conducting research regarding her MBA and Masters in Educational Leadership (M.EL) thesis in our school among the staff involved with curriculum development.

Signed: By the School Principal

ECF EPA Project Manager