Child-centred Education in the Maltese Primary Classrooms through the Let Me Learn Process

Martin de Battista and Marilyn Portelli

14BED069

A Dissertation Presented to the Faculty of Education in Part Fulfilment of the Requirements for the Degree of Bachelor in Education (Honours) at the University of Malta.

May 2014



University of Malta Library – Electronic Thesis & Dissertations (ETD) Repository

The copyright of this thesis/dissertation belongs to the author. The author's rights in respect of this work are as defined by the Copyright Act (Chapter 415) of the Laws of Malta or as modified by any successive legislation.

Users may access this full-text thesis/dissertation and can make use of the information contained in accordance with the Copyright Act provided that the author must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the prior permission of the copyright holder.

ABSTRACT

De Battista Martin & Portelli Marilyn

Child-centred Education in the Maltese Primary Classrooms through the

Let Me Learn Process

The educational process has developed over time from the traditional paradigm of a teacher-centred approach to pedagogies that place the child at the centre of the learning process – that are commonly referred to as child-centred education. Yet, studies reveal that the infrastructure of the schooling system itself may be hindering such pedagogies. This empirical study aims to provide an insightful understanding of child-centred practices from a perspective of Maltese primary classrooms. Furthermore, it aims to explore the benefits of the Let Me Learn (LML) Process in supporting teachers to engage in such practices. The primary aim of this study is to gain a deeper insight on the teachers' experience in the classroom. A small sample size of five primary school educators provided data gathered through intensive, semistructured interviews, clinical observations, as well the analysis of the participants' reflective diaries. Research findings reveal that child-centredness is not overtly practised in Maltese primary classrooms, together with a tendency for educators to yield under professional strain and thus revert to a traditional, teacher-centred approach. The findings also portray that the LML Process is an effective tool to mitigate this regressive inclination of educators and thus support the latter in upholding child-centred education.

> Bachelor in Education (HONS.) May 2014

REFLECTIVE PRACTICE

DIFFERENTIATION

COLLABORATIVE LEARNING

CHILD-CENTRED EDUCATION

LET ME LEARN PROCESS

Authors' Declaration

Martin de Battista							-		Marily	n Po	
references.											
references.											
referenced.	All	sources	used	were	duly	acknowle	edged	by	correct	and	complete
We, the und	dersi	gned, ce	rtify tl	nat thi	s diss	ertation is	our o	wn	work ur	ıless	otherwise

This dissertation is dedicated to all those teachers who listen to their pupils' voices and who appreciate their teaching role as a wonderful opportunity for
reaching out to children.
I, Martin de Battista, am also thankful for the friendship of Samuel and the rest of
the children at the orphanage in Nakuru – your love leads me every step of the way.
I, Marilyn Portelli, would also like to dedicate this dissertation to my family – your love and support has always kept me going in my educational journey.

Acknowledgements

We would like to express our deepest and sincere gratitude to our supervisor, Dr. Michelle Attard Tonna, for her kind and knowledgeable assistance, advice and encouragement throughout the dissertation process.

We also would like to thank and express our appreciation to the Let Me Learn Team for their support, encouragement and ideas.

Our gratitude goes to Mr. Tyrone Mizzi Navarro for proofreading our dissertation.

We would like to thank all the participants for accepting to take part in this study.

Finally, we are totally indebted and thankful to our families for their full support and to Mark Mercieca for his constant help, encouragement and patience.

Table of Contents

Chapter 1: Introduction	1
1.1 The local context of the study	1
1.2 Aims of the study	3
1.3 Key terminologies	3
1.4 Overview of chapters	4
Chapter 2: Literature review	5
2.0 Introduction	5
2.1 The notion of 'the child'	5
2.2 The shift towards child-centred education	6
2.3 Child-centred theories	7
2.4 The Let Me Learn (LML) Process	10
2.5 Active learning	13
2.6 Differentiation	15
2.7 Collaborative learning	16
2.8 Reflective practice	17
2.9 Conclusion	18
Chapter 3: Methodology	19
3.0 Introduction	19
3.1 Research methodology	19
3.2 Research design	20
3.3 Population and sample	21
3.4 Data collection	21
3.5 Interviews	22
3.6 Clinical observations	23
3.7 Document review	23
3.8 Data analysis	24
3.9 Limitations	24
3.10 Conclusion	25
Chapter 4: Findings and discussion	26
4.0 Introduction	26
4.1 The participants	26
4.2 Themes identified	28
4.3 LML – A tool for differentiation	29

4.4 LML – A tool for empowering the learner	36
4.5 LML – A tool for reflective practice	44
4.6 Conclusion	48
Chapter 5: Conclusion	50
5.1 Research expectations and findings	50
5.2 Recommendations for a child-centred approach	51
5.3 Recommendations for the LML process	53
5.4 Limitations and recommendations for further research	53
5.5 Applicability of our study	54
Appendix 1: Consent form	65
Appendix 2: Interviews	66

Figures

Figure	1: Ramona's Class Learning Profile	43
0	$\boldsymbol{\varepsilon}$	_

Tables

Fable 1: The participants	2	1
---------------------------	---	---

Images

Image 1: Pupil's Learning Patterns	38
Image 2: Word Wall	
Image 3: Pupil D and Pupil E using 'Fina'	46

Abbreviations

ADHD Attention Deficit Hyperactivity Disorder

FIT 'Forge', 'Intensify' and 'Tether'

ILM Interactive Learning Model

LCI Learning Connections Inventory

LML Let Me Learn

LSA Learning Support Assistant

MEA Malta Employers' Association

MKO More Knowledgeable Other

MUT Malta Union of Teachers

NCF National Curriculum Framework

ZPD Zone of Proximal Development

Chapter 1 Introduction

Chapter 1: Introduction

This study focuses on child education at primary level from a perspective of Maltese classrooms. We endeavour to shed light on teachers' experiences, highlighting child-centred practices. Furthermore, we seek to explore the benefits of the Let Me Learn (LML) Process in informing teachers to engage in such practices. This chapter aims at introducing the research study and its main concerns. For this purpose, the context and the relevance of the study are discussed. This is followed by an explanation of the research questions, as well as the key terms used throughout the paper. Finally, this chapter gives an overview of the remaining sections in the thesis.

1.1 The local context of the study

This section provides an outline on the current developments in our local education system, including recent developments as well as reforms to be effected in the coming scholastic year (commencing in September 2014). In so doing, we aim to provide a context for our study.

1.1.1 Current developments in the educational system

The study was conducted in the preliminary years that followed a national educational reform – the abolition of selective exams (in 2010) – which witnessed a shift away from a streaming system to a more inclusive educational paradigm. This reform brought about a number of changes in the curriculum. As one of its changes, the Maltese National Curriculum Framework (NCF) 2012, called for an education that is long-lasting and holistic. A fundamental theme of this policy document is highlighted by Principle 4, which stipulates that child-centred learning should be interwoven across the entire curriculum. The document proposes how such a learning approach entails that educators ought to guide their pupils to become active participants in their learning process. The document further states that, irrespective of their attainment levels, social and economic backgrounds, children should be trained to acquire knowledge, transferable skills and attitudes that foster life-long learning. We, the researchers consider child-centred education as vital in a child

rearing process that focuses on learning how to learn and making learning an enjoyable and meaningful process.

The coming scholastic year, commencing September 2014, will witness the introduction of 'banding' in Maltese State Schools. Banding is a system in which pupils are grouped according to attainment levels. However, the groups formed encompass a narrow variety of abilities. As adverse to streaming, were pupils are selected and grouped into homogenous sets, banding allows for a restricted mix of abilities. Professor Mark Borg (2014, April), from the Faculty of Education of the University of Malta, claims banding as "a middle-of-the-road system of grouping pupils whereby these are placed in rank order according to their performance" ("Banding a middle-of-the-road grouping system", para. 1). The educational psychologist suggests that for mixed-ability classes to be successful in reaching all pupils in a diverse class, it would be more advantageous to go through a banding stage before fully implementing mixed-ability classes.

In the same newspaper article Professor Kenneth Wain (2014, April), from the Faculty of Education at the University of Malta, takes an averse position. He argues that it is too soon to determine whether the late reform has been favourable towards pupils' achievement. Furthermore, he claims that it is irrational to reintroduce banding, referring to the latter as a different form of streaming – a system that has already been proven to fail our pupils ("Banding a middle-of-the-road grouping system"). Parallel to Professor Kenneth Wain's arguments, we believe that an inclusive, unselective system is fundamental for child-centred education. Moreover, we believe that with the appropriate support and infrastructures, comprehensive schooling is socially and academically beneficial for our pupils.

1.1.2 The introduction of LML in our local education

The LML Process was launched in the nineties by a coalition of academics and educators that sought to explore how people make sense of their surrounding events. Shortly after, the LML Process was introduced in Malta. The first group of Maltese educators undergoing formal training was in 1999. The LML Process is now coordinated by Dr. Collin Calleja, a member of the Faculty of Education at the

University of Malta. Educators from across all sectors (State, Church and Independent Schools) have the opportunity to attend the LML course on part time basis and throughout the scholastic year. Besides providing a theoretical background and practical experience, educators are further supported after the completion of the course through mentoring by the LML trainers.

1.2 Aims of the study

The aim of our study is to explore and hence gain a profound insight on child-centred practices in Maltese primary classrooms. Through reviewing the related literature and investigating educators' classroom practices, we seek to determine the impact, if any, of the LML Process in fostering a child-centred approach. Furthermore, in this paper we aim to explore the benefits of such an approach and highlight possible LML strategies that support it. Listed below are the research questions which provide the basis of the study:

- What child-centred pedagogies are being practised in our Maltese primary classrooms?
- Does undergoing training in the LML Process support educators to foster a child-centred approach? What strategies render LML a tool for child-centred pedagogies?

The above questions were kept in consideration throughout the study. Subsequently, the following section provides a clarification about the key terms used throughout the paper.

1.3 Key terminologies

Child-centred Education: A paradigm of education that places the child at the centre of the learning process. In such a model, the child informs the learning in a bidirectional process, as averse to traditional teacher-centred education which can be depicted as a unidirectional transfer of information from the teacher to the pupil. Child-centred education is also referred to as student-centred or learner-centred education. In order to avoid confusion and keep consistency we, the authors, opted to use the term child-centred education throughout the dissertation.

The Let Me Learn (LML) Process: Claimed by Dawkins, Kottkamp and Johnston (2010) as an advanced learning system, LML is a process founded on the concept that each of us learn differently. By supporting awareness of how we learn and how others learn, LML fosters what Dawkins, Kottkamp and Johnston (2010) refer to as "Intentional Teaching" (p. 2).

Pedagogy: A pedagogy is defined as a teaching method. It is the art and science of instructing pupils. It may also be defined as a particular technique or strategy of imparting knowledge.

1.4 Overview of chapters

Chapter 2 provides an in-depth critical review of the existing literature in the field of child-centred education. This chapter also provides an overview of the LML Process. The research methodology is outlined in Chapter 3, in which a detailed description of the methodology we implemented is provided. The chapter includes an overview of the research design, the methods used to collect data and the strategy applied for data analysis. Successively, Chapter 4 presents, evaluates and analyses the findings of the study. In the beginning of the chapter, the demographics of the participants is presented. The findings, subdivided into distinct themes, are then presented, analysed and discussed in light of the literature reviewed in Chapter 2. The final chapter, Chapter 5, draws the general conclusion of the study. Lastly, a list of recommendations concerning practice issues with regards to child-centred education are suggested.

Chapter 2
Literature review

Chapter 2: Literature review

2.0 Introduction

As mentioned in the previous chapter, the focus of this research is on child-centred education and how the LML Process may aid educators to develop a more child-centred approach in our Maltese primary classrooms. The chapter first focuses on the segregation of the 'child' from the 'adult' and therefore, the origin of childhood. Section 2.2 moves on to define the rise and the role of education, focusing on how the notion of child-centred education developed from the 18th century "Rousseauean Child" to the "ambiance surrounding child-centeredness in the present" (Baker, 1998, p. 173). Section 2.3 delves into more detail to provide a background of leading theories and literature in the evolution of education towards child-centredness.

"Learners must find their own voice rather than have experts speaking 'at them' or 'for them' or 'about them'" (Lynch & O'Neil, 1994, p.315). Section 2.4 outlines how the LML Process is an effective instrument for educators to construct a listening environment where the voice of the learner is heard and heeded. The process itself is still under development and it is a relatively new as well as exciting concept in education. Alas the literature regarding this area is limited, however, based mainly on Christine A. Johnston's studies, this section provides an outline of the LML Process and the role it plays in fostering higher order thinking and learning.

In light of this study, this chapter also reflects on active learning, differentiation, collaborative learning and reflective practice – pinnacle pedagogies in the educational movement towards child-centredness and inextricably linked to the LML Process.

2.1 The notion of 'the child'

Until recently, children have been overlooked by historians in their recollections of the past. "It is indeed curious to see how little is told of child life in history" (Earle, 1993, p. 23). The segregation of the 'child' from the 'adult' and therefore, the origin of childhood, emerged towards the end of the Middle Ages

(Zelizer, 1985; Steedman, 1990). Ariès (1996) argues that the concept of the distinct 'child' can be traced back to the reconstruction of the immediate family and the idea of maternity. Ariès (1996) further argues that the child is helpless, weak and requires postponement of duties that come with maturity. Going on to the 18th century, nurturing of the child consisted of passing on of "cultural and ethical codes" as averse to teaching the "basic skills of the family's labor" (Baker, 1998, p. 157).

2.2 The shift towards child-centred education

Rousseau is a contributing figure in the early development of child-centred education. Dating back to the 18th century, Rousseau's arguments revolve around the identification of the distinctive features and potential, or "power", of the child (Rousseau, 1979, p. 280). Rousseau (1979) maintains that education should revolve around these potentials rather than the expectations adults have for the child. "They are always seeking the man in the child without thinking of what he is before being a man" (MacLean, 2013, p. 201). "Begin, then, by studying your pupils better. For most assuredly, you do not know them at all" (Rousseau, 1979, p. 34).

The "Rousseauean child" could be credited with the coming of common schooling (MacLean, 2013, p. 201). Emerging first in Prussia, Germany, common schools were designed to instil religiousness in the child. Common schooling based its roots on Christian values and the salvation of the child. Thus, schooling led to the emergence of an establishment specifically designed for the newly segregated child. Such early schooling establishments were designed to lead the latter to redemption and the formation of a prosperous, cultured and literate self (MacLean, 2013).

The late 19th century evinced the come about of the Child-study – a reform movement that targeted the pedagogy taking place in the public schools. This movement aimed to reconstruct the way the curriculum was build. Rather than focusing on the traditional subjects, the Child-study movement proposed that the curriculum should be based on the nature of the children – their abilities and interests that develop with maturity. Child-study also argued the parallelism between child development and the evolution of humans from savages to civilised beings. This movement equates childhood to a stage of savagery which marks the foundation of

the development of the child. As opposed to the Rousseau's 'Émile', the Child-study pedagogy customs a linear spectrum which takes the child away from his savagery nature and leads him/her towards a civilised state (MacLean, 2013).

Child-study principles also led to the conception of the 'handbook'. The latter allowed for efficient assessing and monitoring. Particularly, it allowed educators to measure the development or racial evolution of the child (Rousseau, 1979). The child-centred educator could make use of this effective technology to better build his/her pedagogy around the needs of the individual learner, ensuring as much as possible, the linear development towards civilisation.

Handbooks were meant to portray a complete and on-going picture of a child and were intended as an instrument of care. That is, if more was known about an individual pupil, then more could be done to help her or him develop (Baker, 1998, p. 32).

The child-centred educator is therefore relieved of the distinct authoritarian position as the giver of knowledge and is now constantly working together with the child and learning from the child, as the child learns from the educator.

Recent educational discourse has witnessed "the shift from teaching to learning" (European Studies Union, 2010, p. 17). This phrase was devised by the Bologna Process reforms (1999) to describe the paradigm change in education from the "traditional" or "conventional" educational system to the innovative "student-centred" approach (European Studies Union, 2010, p. 19). The phrase depicts the transfer of "power" from the teacher to the learner, "thus creating mutual ownership of the educational process" (European Studies Union, 2010, p. 19). As adverse to the teacher being the focus of the classroom from which pupils passively receive knowledge, the term "child-centred approach" in itself places the emphasis on the child and the learning experience, or process. This allows pupils to have greater control over their own learning, which as a result also promotes life-long learning (Patton and Kritsonis, 2007).

2.3 Child-centred theories

"Traditional education ignores or suppresses learner responsibility" (Armstrong, 2012, p. 2). Over time, there was a shift from traditional methodologies

of teaching to child-centred pedagogies. This shift has been wildly influenced by theorists like John Dewey, Jean Piaget and Lev Vygotsky. Collectively, their arguments facilitated and influenced the practices of current educators who approach learning through hands-on activities and group work, thus providing the right environment for the individual to construct his/her own learning. Focusing on the preschool years Maria Montessori is another leading figure in the evolution of education towards child-centredness.

2.3.1 Jean Piaget – Cognitive Development Theory

"The child is a scientist, an explorer, an inquirer; he or she is critically instrumental in constructing and organizing the world and his or her own development" (Wadsworth, 2004, p. 4). This control over one's own learning is the basis of Piaget's developmental theory. Piaget proposed that individuals use schemes (schemas), which "are cognitive or mental structures by which individuals intellectually adapt to and organise the environment" (Wadsworth, 2004, p.14). In order to develop their intellect, children must therefore be provided with opportunities to organise new information by encountering new life experiences (Shayer & Adey, 1981).

Schemas are developed by two and complementary processes called assimilation and accommodation. When one encounters new and compatible information s/he assimilates this knowledge. Simply put, s/he fits it into the existing schema (Singer & Revenson, 1996). However, when a new experience conflicts with prior schemas, disequilibrium occurs. The existing schemas need to be altered so as to fit in the new information. This is the process, developed and coined by Piaget as accommodation (Huitt & Hummel, 2003). Piaget described learning as achieving equilibrium – attaining a balance between assimilation and accommodation. When an individual moves from disequilibrium to equilibrium – equilibration – learning occurs (Singer & Revenson, 1996).

Piaget (1952) further claims that children learn differently throughout their lives. Byrnes (2001), as initially proposed by Piaget (1952), recommends the following stages of cognition: sensory-motor (0-2 years), preoperational (2-7 years),

concrete operational (7-11 years), and formal operational (11+ years). At each stage children learn differently, however they are always accountable for their learning, through the process of equilibration.

2.3.2 Lev Vygotsky – Social Development Theory

Parallel to Piaget's arguments, Vygotsky views children as "actively constructing their understanding as a result of their experiences" (Robson, 2006, p. 25). However, averse from Piaget's arguments, Vygotsky (1978) comprehends the significance of social interaction. Berk and Winsler (1995), as initially claimed by Vygotsky (1978), argue that cognitive development is promoted by social interactions. Moreover, cognitive development is enhanced when individuals work in the Zone of Proximal Development (ZPD). Vygotsky (1978) devised the ZPD as "the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 68). The ZPD is the gap between what a pupil is able to reach independently and what s/he can accomplish with the support from a More Knowledgeable Other (MKO). Learning therefore occurs through collaboration with a "more capable" (Robson, 2006, p. 29) peer or adult.

According to Vygotsky, education is to provide experiences that are in the child's ZPDs (Berk & Winsler, 1995), thus giving pupils the opportunity to accomplish problem-solving activities through guidance from educators "capable of making curricular and pedagogical choices which promote high quality teaching and learning" (National Curriculum Framework [NCF], 2012, p.40).

2.3.3 John Dewey – Freedom of Intelligence Theory

Dewey (1963) believed that democracy is a crucial pillar for education. The practice of democracy in schools creates "freedom of thought" and exploration (p. 69). Dewey made a clear distinction between freedom based on free will and freedom of intelligence, which is constructed through observation and being immersed in real-life situations (Tzuo, 2007). Moreover, Dewey (1963) argues that education should serve to enhance freedom of intelligence. Without the existence of

freedom of intelligence it is particularly difficult for an educator to gain knowledge about the individual learners. Dewey advocated that the curriculum should be designed on the "child's own interests, his ways of thinking, and his outlook on life" (Curtis, 1965, p. 162), thus making the curriculum flexible enough to allow the child's individual experience but firm enough for the educator to move the child towards educational development (Tzuo, 2007). Dewey argues that educators should strike a balance in the classroom between "sugar-coated pedagogy" and "penitentiary pedagogy". In the former, learners are left to act freely and thus will not prepare them for life. In the latter, learners are only challenged to answer the educators' questions (Fishman & McCarthy, 1998, p. 23).

Furthermore, Dewey argues that educators should neither focus on the curriculum nor on pupils. Rather, the focus should shift towards the learning process itself. The educator should therefore create situations in the classroom that encourage the learner to access the curriculum. Consequently, the learner is prompted to "intelligently explore, use and remember it [the new knowledge]" (Fishman &McCarthy, 1998, p. 24).

2.3.4 Maria Montessori – The Theory of Inner Freedom

Montessori (1995) believed "that all those undergoing education are isolated from society" (p. 8). Learners are instructed to follow rules under the different institutions found in a school. This could result in the oppression of the child's mind, hindering it from developing freely through the power of teaching oneself (Tzuo, 2007). Avoiding the relinquishing of authority, Montessori (1995) highlights the vital role of education in allowing the learner to be free – inner freedom – in order to seek "exactness, precision and the full achievement" of real-life situations portrayed in class (p. 250).

2.4 The Let Me Learn (LML) Process

Over the years, a number of studies were conducted on the effectiveness of various prevalent learning style models. Coffield, Mosely, Hall & Ecclestone (2004) argue that these studies are "small in scale, non-cumulative, uncritical, and inward-looking", thus hindering their validity and reliability (p. 4). Due to this lack of

consistency, Johnston (1996a, 1996b) together with Dainton (1997) developed an Interactive Learning Model (ILM) basing its foundation on brain science, cognitive science, multiple intelligences and learning styles (Calleja & Borg, 2006). This model revolves around three simultaneous mental processes of "cognition" (thinking), "conation" (doing) and "affectation" (feeling) (Johnston, 1998). Furthermore, Johnston (1998) argues that the interaction between these mental processes give rise to four Learning Patterns: Sequence, Precision, Technical Reasoning and Confluence.

2.4.1 The four Learning Patterns

Johnston (1998) highlights that the individual learner embraces the four Learning Patterns at varying degrees according to the task at hand. She refers to this degree of patterns as the learner's voice. Thus, the LML Process is the crucial pillar that enables educators to hear and listen to the learner's voice. The LML Process enables the educators to create a listening environment. "Listen, listen, listen – listen to the pain, listen for the potential. What a challenge we have – what an opportunity – what a responsibility – we can do it. We use all of who and what we are" (Johnston, 1998, p. 5).

The first pattern described by Johnston (1998) is the Sequence Pattern. This Learning Pattern entails clear, step-by-step instructions. This pattern requires the learner to plan, organise and complete an assignment. Also, the learner might need additional time to check his/her work for neatness and the organisation of ideas. Lack of information or examples might result in frustration from the learner. On the other hand, learners that have a stronger Precision Pattern (learners who tend to Use First their Precision Pattern) constantly seek more information by asking questions, take exhaustive amounts of detailed notes and practice a specific form of writing. In contrast, learners who use Technical Reasoning are inclined to learn from experience and through hands-on activities. In general, the learner prefers to work autonomously and avoids paper-and-pencil assignments (Johnston, 1998). Learners engaging in the Confluence Pattern avoid conventional approaches to complete an assignment. Innovative and creative ideas are sought from the learner to complete any learning

task. The learners are no strangers to taking risks, failing and starting over (Johnston, 1998).

2.4.2 The five LML tools

In their writings, Dawkins, Kottkamp and Johnston (2010) refer to the five strategies to empower the learner as the LML tools. These tools are: the Learning Connections Inventory, the Personal Learning Profile, the Word Wall, the FIT Tools and the Strategy Card. We, the authors, decided to adopt Dawkins, Kottkamp and Johnston's style in devising this section by first discussing the five LML tools.

First tool – Learning Connections Inventory (LCI): The LCI "is a self-report instrument" (Johnston, 1996b, p. 66). This self-administered interview does not test for quality but rather, it facilitates understanding of the learning needs of the individual learners in the classroom. By responding to twenty eight (five-point scale) questions and three open-ended questions, the educator builds the individual learners' profiles and also a general class profile (Dawkins, Kottkamp and Johnston, 2010). More importantly, the LCI gives the possibility to the learner to understand his/her personal learning preferences (Johnston, 1998).

By tallying the individuals' responses, the score for each distinctive pattern is produced. The learner's scores fall into three different categories: Avoid (score between 7 and 17); Use As Needed (score between 18 and 24) and Use First (score between 25 and 35). The responses to the open-answer questions aid to validate the scores of the learner through a meticulous set of protocols (Dawkins, Kottkamp & Johnston, 2010).

Second tool – **The Personal Learning Profile:** Dawkins, Kottkamp and Johnston (2010) highlight the importance for learners to build a Personal Learning Profile which facilitates their understanding of their scores as a learner. Learners build this authentic report by reading the standard pattern descriptors and translating them into their own phrases, thus the learners are describing their own "thinking, actions, and feelings when asked to complete a task that requires Sequence,

Precision, Technical Reasoning, and Confluence" (Dawkins, Kottkamp and Johnston, 2010, p.15).

Third tool – The Word Wall: Once the learner understands his/her pattern scores, it's essential for the learner to start 'Decoding' the tasks assigned, thus identifying which combination of patterns is expected to be used in this particular task. The 'Word Wall' is a valuable learning tool when conducting a task analysis (Dawkins, Kottkamp & Johnston, 2010). Learners are trained to identify key words in the set of instructions given, compare these key words to the cue words on the 'Word Wall' and thus identify the appropriate pattern to use to accomplish this assignment (Johnston, 2010).

Fourth tool – **The FIT Tools:** Following the 'Decoding' stage, learners often require to 'Forge', 'Intensify' or 'Tether' (FIT) their patterns to succeed in completing an assigned task (Johnston, 2010). With practice, learners develop the skill to modify the degree to which they use each pattern. In order to complete a given task, pupils may need to 'Forge' an Avoid Pattern, 'Intensify' a Use As Needed Pattern or 'Tether' a Use First Pattern (Dawkins, Kottkamp & Johnston, 2010).

Fifth tool – **The Strategy Card:** The Strategy Card is the immediate link that connects and supports the learner to master the LML tools (Dawkins, Kottkamp & Johnston, 2010). The Strategy Card facilitates the understanding of one's personal use of patterns (Personal Learning Profile). It helps in 'Decoding' assigned tasks and provides individualised support to allow pupils to identify the degree of response of patterns needed. Finally, it provides strategies to fit one's patterns to successfully complete a task.

2.5 Active learning

Active learning denotes that the learner becomes actively involved in his own learning process, as opposed to the more traditional notion of learning, which views the learner as a passive receiver of information, a blank slate to be filled with information – tabula rasa (Aristotle, 1986).

Child-centred pedagogies challenge the tabula rasa theory by heightening the critical role of "the individual's own awareness and consideration of his or her cognitive processes and strategies" (Flavell, 1979, p. 906). Flavell (1987) argued that this self-reflexive skill, referred to as metacognition, promotes a higher form of learning. Equally, Patton and Kritsonis (2007) identify that intellectual conduct is broadened by metacognition.

Parallel to Piaget's arguments, Nisbet and Shucksmith (1986) regard child-centred learning as empowering the learner to take control of his or her own learning. He argued that it is the educator's role to provide the learner with opportunities to identify and make use of one's own strengths and weaknesses. Camilleri (1999) argued that educators should be committed and "feel a duty to lead learners to increasingly carry more responsibility of their own learning" (p. 17). Additionally, Dousma (1999) points out that both the educator and the learner play a vital role in the promoting of autonomous learning.

Bruner (2009) claims that the child is to be made conscious of the process of constructing new knowledge. His main argument is learning-by-doing, stating that a child truly understands a concept if he is able to apply it. Bruner (2009) goes on to mention the terms discovery by learning and problem solving. Both techniques fall under the umbrella term of active learning. The framework of these terms imply that pupils are presented with a challenge and "are given time to think about the problem presented and to come up with possible solutions" (Gatt, 2000, p. 8). Children learn best when they are stimulated to think by investigating and discovering principles by themselves. Bruner (2009) points out and stresses the importance of intrinsic motivation to stimulate the learner by making use of the good feeling that arises in a learner when s/he comes to the solution. Thus, meaningful engagement satisfies pupils' basic needs for competence, success and fun.

Structured active-learning through problem solving and engaging in critical thinking, rather than simply the teaching of facts, allows the learner to crosslink information and therefore be able to make sense of a wider picture. The Maltese NCF (2012) states that educators should "focus on understanding and emphasise the

learning process and the active co-construction of meaning rather than the mere acquisition of content" (p. 31). The accent is on equipping the learner to come to solutions rather than the learner knowing the answers. It is also vital that the learner is provided with the opportunity to link one's learning with the real world and not only with life inside school. "If earlier learning is to render later learning easier, it must do so by providing a general picture in terms of which the relations between things encountered earlier and later are made as clear as possible" (Bruner, 2009, p. 12). With time, the learner will be able to better organise techniques to come to solutions, and with practice, the transferring of strategies to new situations becomes possible, rendering the learner more independent, therefore promoting lifelong learning.

2.6 Differentiation

A classroom is a group of different individuals with different backgrounds, "learning styles, interests, prior knowledge, socialization needs, and comfort zones" (Patton & Kritsonis, 2007, p. 15). A child-centred approach to education therefore entails catering for these differences, not by simply identifying them and providing individualised support to specific needs but, moreover, by using the different child potentials as a rich resource for further learning. "The major goals schools ought to uphold is that of maximising the learning potential of each child" (Calleja, 2005, p. 20).

O'Brian and Guiney (2001) highlight the important role of the educator in meeting the different needs of the children. In their arguments, O'Brian and Guiney (2001) coin the term "grounded learning", referring to a higher order of learning that takes place when the learner makes a connection between the new knowledge and his/her own "concept of self" (p. 6). It is therefore the educator's role to adapt the curriculum in a way to make the learning accessible to each child.

One of the major issues of current educational discourses is how to create a democratic environment and create equal opportunities through differentiation, yet uphold the conviction of equality. "Some of the most egregious sins against equity of access [to worthwhile knowledge] are committed in the name of providing for

individual differences" (Coombs, 1994, p. 282). Coombs (1994) argues that if one stops at merely identifying differences, this may lead to labelling of pupils, resulting in inhibition of learning, rather than identifying shortcomings in the curriculum delivery.

When debating differentiation in education, an analogy central to any discussion is that "one size doesn't fit all" (Gregory & Chapman, 2002, p. 1). A child-centred oriented educator "can differentiate:

- content
- assessment tools
- performance tasks
- instructional strategies" (Gregory & Chapman, 2002, p. 3)

In Malta, the paradigm shift away from streaming has resulted in mixed ability classes in schools. This reform is supported by the NCF (2012) policy document that states that educators should regard their learners as individuals rather than a group. Principle 1 in the NCF (2012) states that "every child is entitled to a quality education experience and therefore all learners need to be supported to develop their potential and achieve personal excellence" (p. 32). The Education Act (1988) further states that "it is the right of every citizen of the Republic of Malta to receive education and instruction without any distinction of age, sex, belief or economic means" (p. 4).

2.7 Collaborative learning

"The primary means of achieving the new paradigm of teaching [child-centred education] is to use cooperative learning" (Johnson, Johnson & Holubec, 1992, p. 11). This approach promotes the active involvement of the learner cognitively, physically, emotionally, and psychologically (Johnson & Johnson, 1999). Developing from as early as the 1970s, the cooperative learning approach makes use of the pupils' own strengths as rich learning resources. It promotes peer learning through such classroom activities as discussions and debates (Thelen, 1981; Vygotsky, 1978).

Building on Vygotsky's theory of ZPD, Wood, Bruner & Ross (1976) devised the term 'scaffolding' to illustrate the support provided from a more capable peer or adult through collaboration. They argue that collaboration brings about further and enhanced cognitive development. All the theories regarding cooperative learning hold one value in common: they value the intellect of the individual in the group (Powell, 1994).

Cooperative learning enhances both cognitive and social development. Research has highlighted the importance of learning skills such as communication, negotiation and organisation skills that come hand-in-hand with cooperative learning. Furthermore, learning in groups helps the learner form a healthy social identity. Co-operative working appears to have positive consequences for judgments we make about our own worth. Biott and Easen (1994) state that "collaborative learning is essential about the development of the self in a social context" (p. 276). This goes hand-in-hand with Dewey's theory that group work in class gives space for the individual to grow within a society. On the contrary, teacher-centred teaching only exhibits the teacher's habits. In his Pedagogic Creed, Dewey (1897) further argues that education should be an opportunity for the child to experience learning rather than learn for the future.

2.8 Reflective practice

"A moral being is one who is capable of reflecting on his past actions and their motives - of approving of some and disapproving of others" (Darwin, 1871, p. 88). Reflective practice is the primary tool for professional development in any discipline. Pollard (2008) claims that, "the process of reflective teaching supports the development and maintenance of professional expertise" (p. 5). Much the same way as a football coach analyses a game played to highlight the tactics that worked and identify the weaknesses to address them, in a strive to win the next match, an educator, or any other professional, must reflect to see what strategies worked and why, and which ones perhaps need some modifications or scrapping all together, in a strive to improve one's practices. Schön (1983) highlights the importance of "the capacity to reflect on action so as to engage in a process of continuous learning" (p.

165). Simply put, reflective practice is a technique that allows one to learn from one's own experience.

Through practicing reflective teaching, one constantly discovers and reinforces his/her pedagogical principles, giving meaning to the decisions taken. Through case studies, Freidus (1997) concludes that educators who dedicate time to reflective practice own a deeper understanding of their pedagogy, resulting in more effective teaching. Reflective practice allows therefore for more thoughtful practices, rather than superficial practice with no sense of direction.

The LML Process emphasises the importance of reflective practice for more effective teaching, that is "Intentional Teaching" (Dawkins, Kottkamp & Johnston, 2010, p. 2). LML provides a bank of vocabulary that promotes reflective thinking. It provides a language with which learners can communicate between themselves and their educator. Pollard (2008) argues the importance of also reflecting collaboratively, stating that "reflective teaching, professional learning and personal fulfilment are enhanced through collaboration and dialogue with colleagues" (p. 15). LML is therefore an ideal instrument for reflection, as much as reflection is fundamental for the LML Process.

2.9 Conclusion

After experiencing first-hand the negative effects of an oppressive educational system that promotes conformity and measures success with scores, we, the researchers, would like to express the enthusiasm we have to conduct our study and discover techniques that support learners to develop freely through the power of self-teaching. Parallel to Montessori's (1995) arguments about 'inner freedom', we believe that education should aim to promote life-long learning through self-teaching. As the self-explanatory name denotes, the process of Let Me Learn aims to empower the pupil to take control of one's own learning. Furthermore, through our teacher training we discovered the LML Process to be a key tool to instil first and foremost the love for learning, something that perhaps is still lacking in our Maltese primary classrooms.

Chapter 3
Methodology

Chapter 3: Methodology

3.0 Introduction

In our study we seek to highlight child-centred pedagogies and how LML may support educators to implement such pedagogies. The research questions are: What child-centred pedagogies are being practised in our Maltese primary classrooms? Does undergoing training in the LML Process support educators to foster a child-centred approach? What strategies render LML a tool for child-centred pedagogies?

This chapter discusses the methodology employed in our research by presenting an in-depth analysis of the research design. This includes a discussion on the selection of the sample, that is, how we chose our participants from the population that was available. This chapter also provides a synopsis of the instruments utilised to collate the data, followed by a section on data analysis. Lastly, the study's limitations are noted.

3.1 Research methodology

We, the authors of this study, have read for a degree in Primary Education at the University of Malta. Coming from a similar schooling background and having undergone the same teacher training, our educational ideologies are rendered quite similar, although of course not entirely alike. The main principles that underline our pedagogies are ones that value the child as an individual entity with distinct interests, learning abilities and learning styles. This child-centred teaching and learning method is a relatively new concept in educational history and was therefore prominent in our Primary Education degree. One module that maintains this new paradigm is the LML course. We found the course very intriguing in the way its teachings coincide with our philosophy of teaching, that is that we value the intellect of our learners as individuals.

The aim of our study is to measure the impact of the LML course on the educators' pedagogies with regards to child-centredness. We wanted to measure if and to what degree LML fosters more individualised learning in class. More

importantly, we wanted to explore in what ways, if any, educators engaged in LML to employ a child-centred approach. Evidently, this is a complex phenomenon to investigate that we believe requires deeper observation as opposed to quantitative data gathering and statistical analysis. Thus, we felt it was necessary to use qualitative research in order to emphasise the depth of understanding and gather richer observations (Rubin & Babbie, 2005).

Furthermore, we believe that educational theories are inextricably linked with teachers' practices in the classrooms, as much as classroom practice informs innovative theories. Albeit in our ideologies we both sustain a child-centred approach, we feel that related pedagogical theories can only be validated through observational evidence. In this regard, we sought to study the teachers' concepts of child-centred theories. Moreover, we pursued to identify such theories in practice. Thus, in the search for valid findings we engaged in interviews, clinical observations and also gained access to the participants' reflective diaries.

3.2 Research design

A small sample size was chosen by means of accidental sampling (explained further in Section 3.3). This allowed us, the researchers, to set the participants as the point of departure for the research process, therefore offering a better insight by enabling us to tap into the unique and essential understanding of the participants' social world (Hesse-Biber and Leavy, 2005). In addressing honesty, depth and richness of the data achieved, we also tried to achieve validity (Cohen, Manion & Morrison, 2007). In the search for the truth, we carried out in-depth interviews to prompt the participants for more detailed answers which we could then analyse and follow-up with successive questions to interpret their responses.

Bogdan and Biklen (1992) define reliability as the level of precision and comprehensiveness of coverage of the research. Denzin and Lincoln (2005) define reliability in qualitative research as replicability, that is to what degree the results are reflective of the outside world. One form of reliability is inter-rater reliability, which is the degree of unanimity among the researchers. In order to achieve this, we decided to work separately on following the Braun and Clarke's (2006) Thematic

Analysis approach (explained further in Section 3.8). After each researcher transcribed, coded and came up with distinctive themes, the information was compared. In our study, inter-rater reliability was reported as satisfactory when we developed homogeny in our interpretations of the interviews and the phenomena observed.

Triangulation is the use of two or more research methods to affirm one's results (Cohen, Manion & Morrison, 2007). Through clinical observations and by analysing and interpreting the participants' reflective diaries (carried out throughout the course), we sought to create two other standpoints from which to uphold our findings. In doing so, we sought to foster validation of our study's results (Lodico, Spaulding & Voegtle, 2010).

3.3 Population and sample

Participants for this research were approached by means of accidental sampling, which is a sample drawn from an available or convenient group (Alston & Bowles, 2003). Five teachers were chosen from across the three different sectors; one from a Church School, one from a State School and three from an Independent school. The process of selecting respondents first involved establishing contact with one of the organisers and lecturers of the annually held LML course. Subsequently, the latter forwarded our requisition of this research to the teachers enrolled in the course. The requisition also included a consent form noting confidentiality. Teachers who were willing to take part in our study contacted us directly, thereby allowing us to draw an accidental sample of participants. A copy of the consent form is attached in Appendix 1.

3.4 Data collection

The interviews took place within the schools where the participants worked. The latter were assured of the anonymity and confidentiality of the research. Pseudonyms were used in transcripts and observation field notes. Furthermore, a consent form was drafted and signed by the participants in order to obtain permission

to use the knowledge and information they expressed. Moreover, participants were reminded that they could withdraw from the study at any point in time.

Prior to each interview, we obtained permission to record the proceedings. Using a tape-recorder enabled us, the researchers, to also pick up non-verbal cues. These "non-events" (De Vault, 1990, p.106) facilitated better analysis of the data contained in the transcripts. Johnson (2001) argues that obtaining a verbal record is ultimately essential for the analysis to be valid and meaningful.

3.5 Interviews

We chose to base our qualitative research design on intensive, semistructured interviews with five primary school teachers. The said interviews were first conducted prior to the teachers attending the LML course. The participants were once more interviewed following the completion of the course. This enabled us to analyse if, how and to what degree the LML Process aids educators to target their pupils as individual learners, therefore the influence, if any, of the said process towards a more child-centred pedagogy.

Based on Patton's (1990) arguments, we prepared an interview guide prior to the interviews in order to ensure the same basic structure is used among all participants. Patton (1990) argues that interview guides enable researchers to highlight and focus on important and most relevant areas that enlighten the study.

In the first set of interviews, we opened the sessions with an explanation of the study and a short discussion to review issues of confidentiality. This practice was not carried out in the second set of interviews that followed the completion of the course since the participants were already acquainted with the study.

Yet again, we employed semi-structured interviews for a lighter and less formal discussion, allowing us to revise the sequence of questioning, thus enabling the conversation to develop in a more natural way (Krathwohl, 1998; Macionis & Plummer, 2005). Furthermore, the interviews mostly consisted of open-ended questions. According to Patton (1990), such a technique allows the participant to

answer more freely and spontaneously, taking the interview in any direction. Johnson (2001) argues that such digressions and deviations are likely to be very constructive. This helped in giving more in-depth and detailed answers, a richer resource for us to explore and base our interpretations upon.

3.6 Clinical observations

Clinical observations are a dexterous research tool that permit the researchers to investigate their subjects in their natural environment, in this case the classroom. This instrument uses "immediate awareness, or direct cognition" (Cohen, Manion & Morrison, 2007, p. 396) which aids to support the data obtained through the interviews. The observations conducted were of a semi-structured nature. That is, we observed an outline plan of interests but also sought to gather the relevant data in a less methodical and meticulous manner (Gillham, 2008).

As the researchers, we based our observations according to Morrison's (1993) four aspects on which data can be collected. These are:

- 1. "The physical setting" How does the organisation of the classroom facilitate teaching and learning with regards to the LML Process?
- 2. "The human setting" What are the characteristics of the participant (for example gender and class of the teacher) that may affect the data?
- 3. "The interactional setting" How does the participant interact with other actors (formal/informal, planned/unplanned interactions)?
- 4. "The programme setting" How are the resources (related to LML) organised and used? (p. 80)

3.7 Document review

"Providing that accounts are authentic, it is argued, there is no reason why they should not be used as scientific tools in explaining people's actions" (Cohen, Manion & Morrison, 2007, p. 385). For this reason, and for triangulation purposes, we chose to analyse the participants' reflective diaries.

3.8 Data analysis

The interviews were first numbered so as to facilitate referral. As suggested by Denzin and Lincoln (2005), we listened to the recordings for a number of times to support more precise transcriptions, allowing for more accurate and thorough analysis. Following the transcripts, Thematic Analysis was employed to identify repeated patterns within the data from which themes could be identified (Braun & Clarke, 2006).

The process of analysing the data gathered was based on the six recursive phases of Braun and Clarke (2006):

- 1. We transcribed the data and familiarised ourselves with it, noting down initial thoughts.
- 2. We generated initial codes to the gathered data in order to identify unique features of the data.
- 3. We organised the data into potential themes. Relevant coded data extracts were sorted within the identified themes.
- 4. We reviewed and refined the themes.
- 5. The main concept of each distinct theme was identified. This led us to define the themes further and name them.
- 6. Relating to the research question and the literature review, we produced the final report.

As already mentioned we, the researchers, worked separately to identify the themes. Subsequently we compared and discussed the defined themes to produce the final report.

3.9 Limitations

It is pertinent to note that the information given in interviews, as are the phenomena observed in clinical observations, is often an inferred response to the researchers' presence. A limitation therefore of one-to-one interviews, as of clinical observations, is that the researcher/s is/are in the presence of the participants. Hence, the knowledge produced may be biased (Hastrup, 1992; Creswell, 2009).

Additionally, there is a degree of bias in qualitative data due to the subjectivity of researchers. For instance, the latter might note particular information while subconsciously disregarding other influential data. This in turn taints the validity of the study. This said, validity should therefore be regarded as a matter of degree rather than in its entirety (Gronlund, 1981).

Another limitation of the study is the time frame in which we carried out the research, conjoined with the fact that the LML sessions commence early in the scholastic year stretching till late in the year. We, the researchers, are aware that in order to interview all the participants before and after the LML course, we would only be studying educators who are newly introduced to LML. Thus, our research would not comprise the experiences of educators seasoned in implementing LML. Nevertheless, we felt that in order to reach the aim of our research, it was essential to study how and if educators developed over the length of the course. Performing our study over the time period of the course allowed us to follow-up the participants' responses with successive questions. This permitted us to gain deeper and more insightful interpretations of the participants' responses. In turn, this allowed us to gain a deeper insight on the participants' child-centred pedagogies before and after undergoing the LML training.

3.10 Conclusion

This chapter explained the qualitative research tools used, highlighting their advantages and therefore justifying why such tools were employed over others. Finally, the limitations of this research were also identified in order to portray a fairer and more holistic picture. Subsequently, Chapter 4 focuses on the results obtained by employing the methodology discussed in this chapter. It also includes our discussion of the results, which elaborates on child-centred pedagogies and the LML as an instrument to facilitate such pedagogies.

Chapter 4
Findings and discussion

Chapter 4: Findings and discussion

4.0 Introduction

In this chapter we provide a deeper insight on the theme of this research, that is, child-centred education. In exploring this intricate paradigm we seek to elaborate on child-centred pedagogies, namely, active-learning, differentiation, collaborative learning and reflective practice. As the authors, and as prospective teachers, we view such pedagogies as fundamental to our child-centred approach. Moreover, having undergone LML training in our initial teacher education, we seek to explore how such a process can act as a tool to implement child-centred pedagogies in our Maltese primary classrooms. Observations carried out in the study revealed that external constraints such as a vast syllabus and limited time hinder such pedagogies. In this chapter, we further suggest how these difficulties, currently faced by teachers, may be overcome in order to effectively implement a child-centred approach.

In presenting, evaluating and analysing the findings from the interviews, we strove to present a subjective evaluation of results, whilst simultaneously suggesting our opinion. The following writing is therefore based on these two intertwined and interrelated levels of transcribing.

The demographics of the participants are portrayed in the form of a table in Section 4.1. Subsequently, the findings are subdivided into three distinct themes as listed in Section 4.2. The former are presented, analysed and discussed in light of the related research reviewed in Chapter 2. Successively, Sections 4.3, 4.4 and 4.5 delve into more detail on the specific themes.

4.1 The participants

In this section, Table 1 provides the demographics of the participants, specifying relevant, background information that will provide a finer standpoint for the consideration of the results. In our research, we encountered a number of common elements amongst participants and we felt that these can act as variables, being the endogenous factors that influence the participants' pedagogies. We therefore deemed it appropriate to collate and present the data from which we tried to

identify patterns influencing child-centred pedagogies. The variables of interest for the study and their effect on the data are identified in this section.

In presenting the data, schools were kept anonymous to avoid labelling. Moreover, the study is not concerned with the school as an institution, but rather, it seeks to identify child-centred pedagogies. The teacher is thus rendered a fundamental stakeholder. Through observing and interviewing the latter, we sought to identify how each participant embraced child-centred pedagogies. For reasons of confidentiality, we used pseudonyms to protect our participants' identities, hence also upholding our agreement. This agreement, in the form of a consent form (refer to Appendix 1) was signed by both parties. Apart from ensuring anonymity, it stated that the data gathered would be used solely for the purpose of the research study.

Table 1: The participants

Name	Teacher training	Years of experience	School sector	School	Assigned year group	Pupils'
Ramona	M.A. Sociology	5	Independent	A	2	5-6
Danielle	PGCE History	3	Independent	A	4	7-8
Catherine	B.Ed (Hons.)	18	Independent	A	1	4-5
Francesca	PGCE Italian	3	Church	В	6	9-10
Nadine	Supply Teacher Course	20	State	С	2	5-6

Table 1 provides the demographics of the participants. The first column displays the pseudonym assigned to each teacher. The second column notes the kind of teacher training the latter had undergone and the third column shows the years of teaching experience. We felt such information was relevant in providing richer insights on child-centred education practices. In fact, we identified a positive relationship between teacher training and a disposition for child-centred practices, while teacher experience showed less influence. This relationship is evident in

subsequent sections. The fourth and fifth columns specify the participants' current sector of employment and school. In order to increase the validity of the study, participants were selected from across the various sectors of the educational system. It is also pertinent to note that three of the participants are employed by the same school, that is School A. Nonetheless, our study shows no pattern between pedagogies of teachers working in the same school. We are also of the opinion that LML is relevant to all stages of the primary school years, thus, we believe it is apt to include columns six and seven, stipulating the participants' assigned year group and the corresponding age range of the pupils in that year group.

4.2 Themes identified

Following Braun and Clarke's (2006) six steps of Thematic Analysis, we first sought to transcribe the interviews. Working separately, we noted down our initial thoughts. We then progressed to coding the transcripts. Operating individually permitted us to independently identify unique features of the data. Subsequently, in sharing and comparing our findings, we organised our data into potential themes, highlighting relevant excerpts. On reviewing the themes, we identified three distinctive premises on which to suggest LML as a pillar for child-centred education. These premises led to defining and naming three distinctive themes, as listed below:

- LML A tool for differentiation
- LML A tool for empowering the learner
- LML A tool for reflective practice

In analysing the transcripts we, the authors, noted that differentiation was a prominent feature in all the participants' responses with regards to child-centredness and LML. Observations of the said participants further re-established the eminence of differentiation in this regard. Hence, we elicited the first theme: LML – A tool for differentiation. Based on our affiliated perceptions of child-centredness, and informed by the literature reviewed in Chapter 2, we agreed that it is important to adopt the second theme: LML – A tool for empowering the learner. Congruent to the participants' responses, we hold that empowering the learner is crucial in promoting the life-long learner and upholding child-centred education. Lastly, we deemed necessary to include the third theme, LML – A tool for reflective practice. According

to Pollard (2008), reflective practice is crucial for professional development in any discipline. Based on our teacher training and the findings in our study, we feel that reflective practice is essential for fostering and improving ones' child-centred pedagogies. These three themes are further advocated for and explored in the subsequent sections.

4.3 LML – A tool for differentiation

Differentiated teaching is a prominent notion in today's educational discourse. It is a relatively recent concept that developed in the last decade and a half. The concept of differentiated teaching juxtaposes the idea of teaching a group of pupils to that of teaching individuals within a group (Tomlinson & McTighe, 2006). In the last three years, our local educational system has witnessed the abolition of selective exams. The Junior Lyceum Exam was abolished in 2010, replaced by a national assessment – the benchmark – that allowed a smoother, less selective transition from primary to secondary state schools. Another milestone in the shift to a more inclusive system is the successive abolition of the Common Entrance Exam, which saw church school pupils directly progress from primary to secondary schools. This reform was supported by policies such as the NCF (2012). Central to this policy document is the notion that "every child is entitled to a quality education experience and therefore all learners need to be supported to develop their potential and achieve personal excellence" (NCF, 2012, p. 32). This implies that the reformed educational process should now support the ones who were previously classified and labelled as failures. Furthermore, it denotes that schooling should cater for gifted pupils by also providing them with appropriate learning challenges.

This paradigm, which shifted away from streaming, gave rise to mixed ability classes in our schools. This reform brought about new challenges for educators who required training to deal with the resulting turmoil. Yet, unfortunately, educators were left wanting in this respect. This issue is explored further in Sections 4.3.1 and 4.3.2. Section 4.3.3 subsequently provides an insight on how LML can provide a possibility for educators to overcome the difficulties they face in implementing differentiation. The section also highlights the benefits that educators, pupils and the learning process may reap by implementing differentiation through LML.

4.3.1 Celebrating difference

Through the observations carried out for the purpose of this study, coupled with our own experience in Maltese primary classrooms, we noted how limited educators are in their perception of differentiation. Through separate observations we, the authors, witnessed differentiation manifesting through two main trends. Teachers observed, such as Catherine, exhibited differentiation when addressing her pupils' socio-emotional needs. The latter also referred to this trend in the interviews.

Jien naf, jekk ikolli tifel li naf isma' dat-tifel għaddej minn żmien ħażin id-dar ovvjament ħa ntieh *individual attention* iktar mill-oħrajn. Mingħajr ma' nurieh li nkun qed intieh attenzjoni speċjali ntijielu xorta.

You know, if I have a child who is going through a rough time at home, obviously I will give him more individual attention. Without showing him, I will give him special attention.

(Catherine, School A, 29th November 2013)

The second and more prominently exhibited trend of differentiation is that of graded academic assessment - oral and written. Regarding oral assessment, the teachers under observation in our research were inclined to direct higher and lower order questions at 'higher' and 'lower' achievers, respectively. With regards to written assessment, differentiation was seen as implemented mostly through graded worksheets, addressed for 'high', 'average' and 'low' abilities. As the researchers, we noted that in doing so, the educators are in the most part focusing on their pupils' weaknesses, thus diminishing differentiation to a form of streaming within the classroom. The issue we would like to raise here is that, through differentiation, educators ought to be "maximising the learning potential of each child" (Calleja, 2005, p. 20). We believe that rather than focusing their efforts on their pupils' limitations, child-centred educators should seek to identify and, more importantly, provide individualised support to bridge pupils' learning gaps. For example, if a child struggles to read, a performance task should perhaps include less words, rather than no words at all. Unfortunately, our observations and interviews revealed a different reality. This is evidenced in an excerpt from Ramona's interview, in which the child performs a task with the same topic but different objectives, therefore in a way, he is segregated from the rest of the class.

...l-istudent il-ġdid [barrani]
...ehe, jekk jien
tgħajthom...jaqraw erba' lines,
'Min Jien?', u jwaħħlu listampa... hu għalissa
m'għandux...kliem. Mhux se
jaqraha, allura tgħajtu xi ħaġa li
hija l-istess...it-topik huwa listess, imma matching, aspett
iehor mill-istess topik, biex hu,
at least, ikun qed jagħmel malbqija tal-klassi.

student ...the new [a gave foreigner]...yes, if I them...to read four lines, 'Min Jien?' ('Who Am I?'), and stick the picture...for now he doesn't have...words. He is not going to read it, so I gave him something which is same...the topic is the same, but matching, another aspect of the same topic, so that he, at least, would be working with the rest of the class.

(Ramona, School A, 3rd December 2013)

Fielding's (1996) argument transcends from this approach, suggesting that it is only "when differentiation is understood as a process of understanding, valuing and responding to differences in how people learn, [that] it can be a largely positive experience" (p. 79). Claimed by Dawkins, Kottkamp and Johnston (2010) as an instrument of "Intentional Teaching", LML seeks to do just that – understand and celebrate differences in how people learn (p. 2). A child-centred approach values the intellect of the individual, in contrast with teacher-centred teaching, which, as argued by Dewey (1963), only exhibits the teacher's habits. Furthermore, research proves that children learn better from each other. Thus, child-centred strategies ought to make use of child potentials as a rich resource for further learning. LML provides educators with strategies to listen to the voice of the learners and identify their potentials, or strengths, thus fostering a child-centred approach. This is discussed further in Section 4.3.3.

4.3.2 Teachers' professional struggle

As aforementioned, the local educational reform towards comprehensive schooling instigated new challenges, for schools and teachers alike, in catering for mixed ability classes. Unfortunately, through our observations, we came to believe that not enough financial and human resources are invested in overcoming these challenges. Consequently, we found that predominantly teachers lack the sufficient training and thus lack the skills to efficiently implement differentiation in class. This is in line with Professor Mark Borg's (2014, April) claim that "teachers were not properly prepared to teach mixed ability classes, so that many of them were left in

the deep end, trying to cope with a reality for which they did not have the skills to cope with" ("Banding a middle-of-the-road grouping system", para. 16). Moreover, referring to the description of the participants in Table 1, one can observe that only one in five of the sample read a B.Ed (Hons.) course as part of their formal training. We are of the perception that locally the profession of a teacher is politically and socially undermined, that is, we believe that not enough status is given to the teacher and, in turn, not enough is invested into teacher training. In our opinion, teacher education should engage in substantial training that reflects the significance of the profession itself.

Additionally, we found that the school structures themselves impede comprehensive education. Analogous to our beliefs, the Malta Union of Teachers (MUT) claims that "mixed ability classes need to be smaller..., with more support in the classroom" (Bencini, March 2011, Teacher Training for mixed ability classes necessary – MUT, para. 4). The last clause of Bencini's statement highlights yet another hindrance for effective comprehensive education; namely, that teachers are not being supported. This is triggering the teachers to feel overwhelmed with professional strain. Through the observations carried out in this study, along with our teaching experience, we noted that most Learning Support Assistants (LSAs) tend to dedicate all their time and efforts solely to their assigned pupil/s. As a result, the LSAs are falling behind on their responsibility towards the rest of the class. Moreover, LSAs are not assigned to pupils with behavioural and psychosocial difficulties. Amassed, all these factors result in an environment that encumbers child-centred education. Thus, as Francesca exclaimed, teachers are reluctantly leaning to a curriculum-centred approach.

It is pertinent to note that this phenomenon has already occurred in our local educational history. In 1972, the then Minister of Education, Agatha Barbara, introduced the concept of Comprehensive Schooling. However, the reform failed soon after in 1981. The fall of this short-sighted reform was mainly due to insufficient teacher training (Zammit Marmarà, 2001). Such a phenomenon is reoccurring in our present educational system. Ramona for example fails to fully comprehend the notion of differentiation. As she explains, this notion is merely

concerned with catering for the minority, which albeit is a central part of differentiation, is certainly not the absolute goal.

...eżempju jekk dan it-tifel għandu bżonn hekk [metodu partikolari] mela kollha jagħmlu bħal m'għandu bżonn dak it-tifel. ...for example if a child needs this [a particular method] then they all do as that child needs.

(Ramona, School A, 3rd December 2013)

Through the interviews, as well as observations, we noted that the larger part of the participants view differentiation in bad lighting. It is also evident from current, local educational discourse that this view is nationally prevalent. In fact, most educators are in favour of reinstating the streaming system. Francesca's response depicts the professional strain teachers are suffering to overcome the abovementioned shortcomings and cater for their mixed abilities.

ideoloģija...ideoloģija Hmm ta' differentiation. Ideologija li għalkemm fit-teorija jtuk ftit fuqha forsi just ikollok xi ideat. Meta tiġi biex tapplika dik 1ideoloģija fil-każ tiegħi rrid nagħmila ħafna. Ghalfein? Ghax ghandi tfal mixed...mixed 1_ ability. Ħabba benchmark...ghandek mixed ability...u allura għandek qisek tlett gradwatorji!

Hmm ideology...ideology of differentiation. An ideology that we were not trained much on, but of which you just have some ideas. In my case I have to apply this ideology often. Why? Because I have children with mixed abilities. Due to the benchmark...you have mixed abilities...so you have like three ranks!

(Francesca, School B, 25th November 2013)

Albeit all participants appreciated the need for differentiation, a common feeling of anxiety impinged their responses. This was exclaimed most clearly by Ramona.

Dis-sena, *luckily enough*, wieħed biss għandi [tirreferi għal student ta' 'abilita' baxxa'] u nista' nagħmillu flexkards għalih u affarijiet hekk!

Luckily enough, this year I only have one [referring to a 'lower ability' pupil] and I can prepare flashcards and other resources for him!

(Ramona, School A, 3rd December 2013)

The factors discussed in this section reflect a general, superficial understanding of the notion of differentiation. The overall result is that educators are leaning away from child-centredness. In the following section, we aim to highlight how LML aided our participants to overcome the negative connotation of differentiation.

4.3.3 Overcoming the taxing connotation of differentiation

Observations revealed that teachers viewed differentiation as a burden imposed by the introduction of mixed ability classes. When viewed as having to cater for two or more ability levels rather than just one, differentiation is seen as a larger work load for the educator. However, Fielding (1996) suggests that differentiation can be a positive experience when educators focus their attention on differences in how their pupils learn, rather than differentiating according to attainment levels. The LML Process is a system that helps educators to understand and react to the different ways in which people learn, thus supporting 'Intentional Teaching' (Dawkins, Kottkamp & Johnston, 2010). In the excerpt below, Ramona explains how LML was a revelation that helped her to better understand differentiation and overcome her professional frustration. Whereas before she felt incompetent in addressing her pupils' diverse needs, she claims that LML has equipped her with the skills to implement differentiation, thus upholding child-centred education.

Sirt nadatta wkoll through LML għax qabel ma kontx nagħmilha ħafna [differentiation], sincerament. sirt naghmel metodu differenti. Jekk qed naghmlu adding, ghax dan pereżempju persuna tekniku, noħroġlu lcoins, fil-każ ta' money, u jagħmilhom bil-coins, waqt li loħrajn qegħdin jiktbu biss. So it helped me li naghraf kif forsi nista' nwassal. iddifferentiation. Mhux karti biss, imma kif twassal il-lezzjoni tiegħek.

I began to adapt through LML because before I did not used to do it much [differentiation], honestly. Now I differently. If we're doing adding and for example this child leads with Technical, I give him coins, if the topic is money, and he works with coins, while the others are writing. So it helped me to how understand implement differentiation. Not only in worksheets, but also in how I conduct my lessons.

(Ramona, School A, 7th April 2014)

Additionally, Francesca explains how getting to know her pupils more in depth through the LML Patterns created positive teacher-pupil relationships. We observed that fostering such a positive class ambiance in turn promoted the pupils' motivation, as well as the educators' motivation. In the excerpt below, Francesca describes a particular case in which Pupil A was labelled as a disruptive pupil and how, year after year, this resulted in him feeling discouraged and frustrated. Becoming aware of his Learning Patterns, Francesca came to understand her pupil better. This helped her implement differentiation by adapting and catering for his specific needs. In this case, Pupil A needed a more active role in decision taking regarding his learning. Francesca explains that by being allowed more independence, the child started feeling more secure and motivated to participate in class. Gradually, this lifted his confidence, allowing him to also start building positive relationships with his teacher and peers.

Fil-bidu tas-sena kien tifel impulsiv hafna...he had very manners aggressive and ways...Ra li bdejt nimplimenta certu affarijiet [strateģiji tal-LML] u bdejt narah jieħu interess. Eżempju jekk ngħidlu li jrid jaghmel dan ix-xoghol tarah jibdieh, meta hu s-soltu jħalli f'idein ommu dar...Anke fil-Maths rajt ilmarki jitjiebu by twenty or thirty marks. Ghalfejn? Ghax ħalleitu iaħdem bil-metodu tiegħu. It-tifel kien dejjem frustrat. jħossu iktar Issa komdu. Filfatt harget fir-report tal-IEP (Individualised Education Programme)

In the beginning of the year he was a very impulsive child...he had very aggressive manners and ways...He saw that I started implementing certain things [LML strategies] and he started showing interest. For example, if I tell him to perform a task, he carries on when usually he relies on his mother at home...even in Maths I saw his marks improve by twenty or thirty marks. Why? Because I left him to use his method. The child was always frustrated. Now he feels more confident. In fact it was evident in the **IEP** Education (Individualised Programme) report.

(Francesca, School B, 14th April 2014)

Looking at differentiation through the LML lens enables educators to overcome the taxing connotation of differentiation by understanding their pupils as individuals, rather than treating them as selected groups of abilities within a collective. Pupil A's case demonstrates that if educators stop at merely identifying differences, this may lead to the labelling of pupils. Coombs (1994) claims that

labelling a pupil will inhibit his/her learning. Upholding Coomb's view, Nadine argues the importance of adopting a non-judgemental approach towards pupils. She claims that only through breaking down preconceptions and exercising empathy that a teacher can build a relationship with one's pupils. She explains that LML has helped her to better understand her pupils, which in turn allowed her to empathise better and refrain from labelling. As she argues below, failing to form a positive teacher-pupil bond will impede learning.

Hafna minnhom [l-ghalliema] tipo jgħidulek "dak it-tifel imqareb, u dak it-tifel hekk, u dik it-tifla taf kemm hi brava?!" Jekk ser tapplika judgemental attitude fil-klassi, insa' li ha tghallem u ha tkun effett fughom tfal]...apparti non-judgemental attitude trid tuża' ħafna empathy.

A lot of them [the teachers] tell you "that boy is naughty, and that boy is so, and you know how clever that girl is?!" If you're going to apply a judgemental attitude in class, you will not teach or have any effect on them [the pupils]...besides nonjudgemental attitude you need to empathise.

(Nadine, School C, 11th April 2014)

During observations, as well as interviews, we noted that a deeper understanding of one's pupils – achievable through identifying their LML Patterns – leads to create a sense of security for the learners. Such a serene child-centred environment will in turn promote socio-emotional development as well as academic success. We further noted that such an environment simultaneously tapers the professional strain brought about with the introduction of mixed ability classes, in turn permitting a child-centred approach.

4.4 LML – A tool for empowering the learner

The term empowering the learner depicts a setting in which the latter is somehow emancipated. The empowered learner finds the learning meaningful and feels competent as well as motivated to perform the learning tasks (Houser & Frymier, 2009). Empowering educators therefore have the task of making the learning relevant to their pupils, thus supporting them to appreciate the significance of learning tasks. In striving to engage one's pupils, the empowering educator is required to plan tasks with appropriate challenges according to the pupils' unique intellect.

By posing Johnston's (1998) question "Who is the "me" in Let Me Learn?" we seek to explore how, as a process, LML supports educators to empower their learners, thus upholding child-centred pedagogies (p. 35). According to Johnston (1998), the answer to the abovementioned question is the child in class – a learner with a distinctive set of interrelating, Learning Patterns and therefore, a unique intellect. With regards to LML, the first step to empower the learner entails accessing and recognising this internal and unique combination of patterns identifying the 'me'. This is facilitated through the first tool of LML, which is the Learning Connections Inventory (LCI) – a self-reporting instrument that permits the learner to understand his/her personal learning preferences. As explained in Chapter 2, the other four LML tools are: the Personal Learning Profile, the Word Wall, the FIT Tools and the Strategy Card. Rather than exploring each tool successively and independently, we believe that it would be more beneficial to focus on child-centred pedagogies that are essential for empowering the learner, whilst simultaneously illustrating how the former intertwine to support such pedagogies. Section 4.4.1 discusses strategies in engaging the learner and reviews the benefits of active learning. Section 4.4.2 builds on the latter and explores the benefits of nurturing the life-long learner, through fostering autonomy and independence. Section 4.4.3 explores how collaborative learning empowers the pupils, promoting academic as well as socio-emotional health.

4.4.1 The active learner

Patton and Kritsonis (2007) identify the active learner as one who is made aware of his or her cognitive processes. They claim that developing this skill of understanding one's own thought processes – metacognition – will broaden one's intellectuality. Principle 4 of the NCF (2012) claims active learning as one of the main pillars for child-centred education, highlighting the essentiality of purposefully engaging the learner. Likewise, the European Studies Union (2010) identifies the importance of "creating mutual ownership [between the teacher and the pupil] of the educational process" (p. 19), claiming that in such a stance, the active learner feels more motivated and further enjoys the learning process. This method of teaching can be achieved by providing opportunities for the pupils to investigate and discover

principles by themselves. The emphasis is therefore placed on the learning process and the learner assuming greater control over his/her own learning (Patton and Kritsonis, 2007).

Bruner (2009) emphasises the importance of intrinsic motivation to stimulate the learner, by utilising the positive emotions that ensue when s/he comes to a solution. As described by one of the participants, meaningful and effective engagement satisfies pupils' basic needs for competence, success and fun, which in turn facilitates learning.

L-ewwel nett, qabel xejn, it-tfal iridu jkunu kuntenti. Jekk it-tfal m'humiex kuntenti tista' tghallem kemm tghallem ghax it-tfal ma' jiehdu xejn.

First of all, the children have to be happy. If the children are not happy, you can teach and teach but the children will not learn anything.

(Nadine, School C, 12th December 2013)

In empowering the learner, educators should provide opportunities that permit pupils to experiment with different methods to reach the same goal. This is supported by Nisbet and Shucksmith's (1986) argument whereby it is claimed that such opportunities allow the learner to identify and make use of one's own strengths and weaknesses. Through completing the LCI and building the Personal Learning Profile, LML permits pupils to identify one's patterns. When faced with a task, awareness of one's patterns permits pupils to recognise their own strengths and weaknesses according to the requirements of the task. Portrayed below, Image 1 illustrates how Francesca directed her pupils to register their LML Patterns on key fobs attached to their pencil cases.

Image 1: Pupil's Learning Patterns



As Francesca elaborates, by having a prominent visual of their Learning Patterns pupils feel empowered to take on new learning challenges. During an observation of a Maltese creative writing lesson, directed by the same participant, we noted that by being aware of one's own patterns, pupils felt more encouraged to perform the assigned task. In this case, pupils were to plan an essay with the title "Laljeni li niżlu fl-Ajruport Internazzjonali ta' Malta", (The aliens that landed in Malta's International Airport). Pupils were left free to use different methods to brainstorm and create a sequence of events for their writing. The child whose patterns are illustrated in Image 1 is a strong-willed learner, meaning that three out of four patterns - Technical, Precision and Confluence - are at a Use First Level (Dawkins, Kottkamp & Johnston, 2010). Acknowledging his strengths, the child felt more confident drawing detailed and labelled scenes. Supportively, Francesca intervened to direct the latter to number the scenes. To complete this task, the pupil needed to embrace his weakness and use the FIT Tools to Intensify his Sequence Pattern. Concurrently, other pupils used different pre-writing methods to reach the same goal.

As disclosed below, Nadine similarly upholds Nisbet and Shucksmith's (1986) argument in providing opportunities for pupils to explore various methods in reaching a common goal.

Eżempju jekk ha jitghallmu ikollhom jgħoddu, li opportunita` jesperimentaw kull tip ta' metodu...ma jkunux restricted għal metodu wiehed...I'm open to all kinds of methods u skond it-tfal. Allura, m'ghandiex ideologija wahda, skond kif jitghallmu. Hemm certu tfal jitgħallmu b'ċertu mod, ċertu tfal b'mod jitgħallmu ieħor. jigifieri trid thallihom miftuhin, liberi, timraħ bħala għalliema.

For example if they are going to learn to count, they will have the opportunity to experiment with various methods...they will not be restricted to one method...I'm open to all kinds of methods, according to the children. So I don't only stick to one ideology, it depends how they learn. Certain children learn with one method, others with another, so you need to leave them open and free.

(Nadine, School C, 12th December 2013)

At first glance, nurturing active learners might seem like a hefty burden for teachers. During one observation for instance, Catherine expressed fear of losing control over her class. In such a case, the benefits of empowering the learner might become obscured or outweighed by the distress teachers suffer in trying to cover the syllabus. Conversely, the abovementioned examples of pupils using the LML tools propose a feasible process to train children to acquire transferable skills. As we observed, actively acquiring such skills supported pupils to become autonomous in their own learning. Such paradigms thus nurtured the life-long learner.

4.4.2 The life-long learner

Inextricably linked with the notion of active learning, promoting the life-long learner involves educators guiding the child to develop more autonomously through the power of teaching oneself (Montessori, 1995). As accentuated in Outcome 1, the NCF (2012) states that education should aim at "enabling children to acquire knowledge, concepts, skills, values and attitudes which will allow them to develop into lifelong learners able to progress at their individual pace of development" (p. 50). In such an educational process, education should be concerned with providing and exploring life experiences, not merely learning and preparing for the future (Dewey, 1963). Schools should therefore be an extension of the child's home life to the extent that the links between learning and the real world, beyond the school life, should be emphasised. Francesca provides evidence of her pupils being in charge of their own learning by being aware of the reason for which they are learning it.

Jiġifieri l-aim tiegħi hija dejjem...li jifhmu [l-istudenti] għalxiex qed jitgħallmu dak issuġġett biex jużawh anke japplikawh għall-ħajja tagħhom.

Therefore, my aim is always...that they [the pupils] understand why they are learning that subject so that they use and apply it in their lives.

(Francesca, School B, 25th November 2013)

Fostering the life-long learner transcends from merely preparing pupils for exams. We believe that it is an unfortunate reality that locally the main educational concern revolves around the notion of summative assessments. This is evident from class observations, and moreover, from discourses from all actors involved, namely, parents, pupils and teachers alike.

Hawnhekk *summative* isir biss…li nagħtu każ…anke li jagħtu każ il-*parents*…hu t-test tal-aħħar.

Here we only do summative...what we regard... and what parents regard...is the final test.

(Ramona, School A, 7th April 2014)

Adversely, Danielle – Ramona's colleague – concurs with Dewey's claims that education should focus on the process and not the product (Fishman & McCarthy, 1998). As she explains, the role of the teacher is to empower the learner to acquire skills to come to solutions, rather than merely learning the answer by heart.

...u hopefully they retain it [it-taghlim], mhux speċi tghallimta bl-amment and that's it.

...and hopefully they retain it [the learning], not just merely learn it by heart.

(Danielle, School A, 10th April 2014)

During the observations, Danielle revealed how, through the use of the Word Wall and Strategy Cards, she led her pupils to acquire skills to become self-sustainable learners. Image 2 displayed below illustrates the Word Wall set up in Danielle's year 4 class. This LML tool allows pupils to decode a given task by first identifying the instructions' key words, then comparing them to the cue words on the Word Wall. This allows pupils to identify which combination of patterns is required. Successively, the Strategy Card is utilised to aid pupils in how to use their Learning Patterns most effectively (Dawkins, Kottkamp & Johnston, 2010).



Image 2: Word Wall

While observing Danielle conducting a Mathematics lesson on 3-D shapes, the pupils were challenged with a number of tasks. The first task included cutting out a net from which to build a cube. We noted that Danielle wrote the instructions clearly on the board and reminded the pupils to use the Word Wall in order to identify the patterns needed to complete the task at hand. As the lesson progressed, the pupils were asked to fill in a worksheet regarding the properties of a cube. At this point we noted a number of pupils referring back to the Word Wall. The last task required pupils to distinguish and label the nets of a cube, giving reasons for their answers. Without any prompting from her teacher, Pupil B – who is currently statemented and waiting to be assigned an LSA, and whose Precision is at an Avoid Level – used her Strategy Card to identify the best strategy to complete the task. The card advised the pupil to Forge the Precision Pattern and 'look for clues like a detective that I can use to make my point'. It is evident that Danielle's pupils are being trained in becoming autonomous learners. Supporting the learner to become more independent is the core of fostering the life-long learner (Bruner, 2009). Over time and with practice, acquiring these transferable skills, such as using the Word Wall and the Strategy Cards, children like Danielle's pupils are nurtured to become life-long learners.

4.4.3 The collaborative learner

Collaborative learning is a child-centred approach that values the intellect of the individual within a group and permits pupils to act as learning resources to each other (Powell, 1994). Such a pedagogy is featuring more prominently in recent years, as opposed to our own primary schooling experience (around fifteen years ago). The framework of this child-centred approach revolves around Vygotsky's theory of Zone of Proximal Development (ZPD) – the discrepancy between a pupil's independent attainment level and the potential level reached with the support of a More Knowledgeable Other (MKO) through collaboration (1978). LML facilitates this pedagogy by making use of the pupils' patterns to support each other's learning. By tallying the Personal Learning Profiles, a Class Learning Profile permits educators to gain a better picture of the pattern levels in class. Pairing or grouping pupils according to Learning Patterns allows for what Dawkins, Kottkamp and Johnston referred to as 'Intentional Teaching' (2010). Concurrent to our experiences

in class, Ramona explains that grouping children according to abilities has a tendency to reassure 'higher ability' pupils while disheartening and hindering the participation of 'lower ability' pupils, thus defeating the purpose of collaboration. In the excerpt below, Ramona further claims that by grouping according to LML Patterns, pupils started acknowledging that everyone has his/her own different strengths. This resulted in more participation of all pupils. Following the excerpt, Figure 1 depicts Ramona's Class Learning Profile in relation to her own patterns.

Qabel kont just naghmilhom [gruppi] through ability, mhux Learning Patterns, as in...ikun hemm mix ta' high ability, low u average. Issa qed nipprova nagħmilha li ikun hemm Technical Sequential...li u jkunu l-erba' patterns in the same group, or at least two or three so that they help each other, u kollha jgħidu xi ħaġa.

Before I used to plan them [groups] through ability, not Learning Patterns, as in...there would be a mix of high ability, low and average. Now, I'm trying to include Technical and Sequential...to include the four patterns in the same group, or at least two or three so that they help each other and they all say something.

(Ramona, School A, 7th April 2014)



Figure 1: Ramona's Class Learning Profile

Another benefit of collaborative learning is that it acts as a socialising agent, promoting the "development of the self in a social context" (Biott & Easen, 1994, p. 276). This goes hand-in-hand with Dewey's (1963) theory that group work in class gives space for the individual to grow within a society. In other words, learning in

groups promotes socio-emotional development. Bennett (2003) claims that working collaboratively influences one's self-concept and that a positive self-concept in turn promotes academic success. This is demonstrated in the case of Pupil C from Francesca's class. Due to the pupil's Attention Deficit Hyperactivity Disorder (ADHD) condition, the latter was always withdrawn. As observed by the teacher, the condition also inhibited the pupil from forming any relationships with his peers. Francesca exclaims how, by leading Pupil C to become aware of his own strengths (high Technical and Confluence Patterns), the latter started feeling more competent and motivated to participate in the learning process. Grouping her pupils according to the LML Patterns created a situation that allowed Pupil C to identify his strengths and gradually recover his self-concept. Evident from our observations, empowering Pupil C led to his holistic development. The NCF (2012) states that developing personal and social skills is vital in order to empower the learner. Moreover, addressing Pupil C's socio-emotional needs further promoted his academic success.

4.5 LML – A tool for reflective practice

Reflective practice is a technique that permits one to evaluate and learn from life experiences. As any other discipline, the teaching profession is constantly changing, paralleling the societal needs in a rapidly evolving world. Freidus (1997) claims that reflective educators better understand their pedagogy and the outcomes the latter has on their learners. This in turn results in more effective teaching. Coining the term 'Intentional Teaching', Dawkins, Kottkamp and Johnston (2010) affirm the importance of reflective practice for thoughtful and focused teaching with a sense of direction. This affirmation is explored in the subsequent sections that shed light on how LML renders as a tool for reflective practice. Section 4.5.1 portrays how LML provides a language bank to facilitate reflection to both children and adults. Section 4.5.2 illustrates how, in becoming aware of one's own patterns, educators are provided with a context from which to understand their pupils. In helping to understand one's pupils – become aware of their individual strengths and needs according to the patterns – LML provides a strategy for educators to uphold child-centred education.

4.5.1 The LML language

'Sequence', 'Precision', 'Technical' and 'Confluence' - these are the Learning Patterns identified by the LML Process. Acquiring knowledge and understanding of these terms provides educators with a particular vocabulary that serves as a context for reflective thinking. Additionally, LML provides a specific language with which educators can communicate between themselves to engage in collaborative reflection. As mentioned earlier, LML provides a language bank to facilitate reflection for both adults and children. Created by the Maltese LML team, the story 'Four Friends in Lelluxa Valley', brings the four Learning Patterns to life in the form of four loveable and child-appealing characters. The latter, 'Geru', 'Fina', 'Faru' and 'Żringi', are portrayed as the pupils of 'Ms Warda', and they all learn differently. As represented in the story, 'Geru' (Sequence) is a puppy who likes to keep order and asks a lot of questions. 'Fina' (Precision) is a tortoise who likes to read and write. 'Faru' (Technical) is a mouse who likes to fix things and likes working alone. 'Żrinġi' (Confluence) is a frog who likes to be creative. It is pertinent to mention that this story is available in both Maltese and English languages, and in two versions, appropriate to both Early Years and Junior Years.

In the excerpt below, Catherine explains how the pupils in her class got accustomed to the puppets and formed an amiable bond. By associating themselves to the puppets, the pupils started subconsciously reflecting and understanding themselves through their Learning Patterns. Furthermore, by referring to the puppets, the pupils were trained to identify the patterns needed to carry out a given task. As Catherine explains, she also came to consider the LML language as invaluable for her reflective practice, which in turn informs her planning according to her pupils' patterns.

tal-*puppets* L-użu eżempju jiena jghinuni hafna fil-klassi. Hmm...u 1-istess affarijiet specialment fein jidħlu attivitajiet. It-tfal mill-ewwel jagħmlu bdew bond puppets. Jibdew jassoċċjaw ruħhom u l-attivitajiet malpuppets.

The use of the puppets, for example help me a lot in class. Hmm...and especially in activities. Children instantly started bonding with the puppets. They begin to associate themselves and the activities with the puppets.

(Catherine, School A, 7th April 2014)

While observing Catherine delivering an English Creative Writing lesson, we witnessed the extent of the potential that the puppets could have in supporting the pupils' learning process. The theme of the lesson was 'People who help us'. The pupils were given cards depicting people in various occupations. The main objective of the lesson was to finally write a sentence about the picture in hand. Having their Precision Pattern at an Avoid Level, Pupil D and Pupil E were encouraged to choose the appropriate puppet that could help them complete the task. Independently, the said pupils selected 'Fina'. Catherine directed her pupils to first narrate the sentence to 'Fina', before writing it down in their copybooks. It was evident that through reflecting upon their patterns and identifying themselves with the puppet, the pupils felt confident to overcome their anxiety to write a sentence. Based on our background, we – the authors – are of the opinion that the value of the puppets is in providing a context or reference point and that their effectiveness is due to their tangible nature. Furthermore, it is apt to note that even at a young age, Catherine's pupils are being encouraged to independently choose the relative puppet. In doing so they are being skilled to become autonomous in their own learning. Below, Image 3 illustrates Catherine's pupils using 'Fina' to complete their task.



Image 3: Pupil D and Pupil E using 'Fina'

4.5.2 Understanding myself, listening to others

One of the greatest prospects of LML lies in its value for self-awareness. In inscribing our personal reflective journals (one of the essential tasks of the LML course) we became conscious of how we learn ourselves. By relating to our leading patterns we came to better understand our daily behaviours. The participants also

upheld this perception. This is evident in an extract from Catherine's reflective journal in which she expresses how she came to better understand herself.

Naħseb l-iktar ħaġa li laqtitni hija l-patterns li kont nitgħallem bihom jiena u li *I lead* bihom jiena, li lanqas biss kont *aware* tagħhom.

I think what struck me most is the patterns that I learn with and lead with. I was not even aware of them.

(Catherine, School A, Reflective Journal, Entry 2)

Moreover, Nadine remarked that by identifying how she learns, whilst appreciating that others learn differently, successively made her more conscious in her professional approach. Furthermore, she claims that her new knowledge of the LML Process also helped her form a deeper understanding of her own schooling process. Consequently, understanding herself helped her listen to the voice of others. Additionally, Nadine explains how a consciousness of her patterns along with a better awareness of her pupils' patterns, helps her to address all pupils. She claims that LML has taught her how to identify shortcomings in her delivery and make a conscious effort to adapt her approach, whereas before she would be inclined to label a challenging child as unreachable. The excerpt below illustrates how Nadine is making a conscious effort to restrain her Use First Pattern, subconsciously referring to tethering her Confluence Pattern.

Qabel ma' għamilt LML kont iktar konfluwenti, jiġifieri għalkemm aħna...hemm dik il-margin, tista' tnaqqas u żżid ukoll [il-patterns]

Before I attended the LML course I was more confluent, so although we are...there's that margin where you can increase or decrease [one's patterns].

(Nadine, School C, 11th April 2014)

Salient to her views is the notion that what is effective with her present class will not necessarily work with next year's. Portrayed below, Nadine describes how she came to see her pupils as distinct degrees of patterns, thus upholding child-centred education.

Dejjem qisu sar [LML] iccentru ta' kollox fit-teaching. Ghallinqas jien hekk inhossni, li sar ic-centru. Jekk inkun qed nippjana xi lesson plan, indahhal il-LML. Jekk qed It [LML] became the centre of everything in teaching. At least that's how I feel, that it became the centre. If I'm planning a lesson plan, I include LML. If I'm reflecting, I include LML. I

nagħmel riflessjoni ndaħħal il-LML. It-tfal inħares lejhom skond il-*patterns*.

look at the children according to their patterns.

(Nadine, School C, 11th April 2014)

Looking back on her schooling years (around fifteen years ago), Danielle recounts how she felt betrayed and secluded by the educational system. She explains that by reflecting through the LML lens, she came to understand why, in her opinion, the system had failed her. Having Use First Technical and Confluence Patterns mismatched the requirements for success in such an educational process that demands high scores in Sequence and Precision Patterns. In her interviews, she explains that the present educational system still favours pupils with high scores in Sequence and Precision Patterns. On this argument we raise the question: Is our educational system truly child-centred? Upholding the ideology of acceptance and fairness, Danielle maintains that the system should also cater for pupils with Use First Technical and Confluence Patterns. These values also come across in the story, 'Four Friends in Lelluxa Valley', which encourages pupils to accept pupils with different patterns.

4.6 Conclusion

There is evidence that at large, educators in our Maltese primary classrooms favour child-centred education. However, the study also provides an indication that most teachers lack the skills to implement such a paradigm. In providing a deeper insight on child-centred education, we sought to explore how the LML Process can act as a tool to implement such a pedagogy. The study highlighted and explored three premises that rendered LML as an instrument for educators to engage in a child-centred approach. As this chapter explains, we believe that the LML Process can support the child-centred educator by acting as a tool for differentiation, a tool for empowering the learner and a tool for reflective practice.

All the participants of our study expressed their satisfaction with undergoing the LML course. They all claimed that practising LML supported a more individualistic approach to teaching. We also observed that LML aided teachers to shift from an authoritarian figure to a more authoritative figure – a teacher that sets clear rules but is simultaneously responsive to the individual pupil's needs.

Moreover, all participants claimed that they would recommend LML as an effective strategy in upholding child-centred pedagogies.

Chapter 5 Conclusion

Chapter 5: Conclusion

Section 5.1 of this chapter reviews the findings of our study in relation to the research expectations. Informed by the latter, in Section 5.2 we suggest recommendations for fostering child-centred education. Successively, we suggest recommendations for the LML Process that would perhaps enhance its efficacy as a teacher support tool. Section 5.4 highlights the limitations of our study and the recommendations to overcome these restrictions in possible future studies. Finally, in Section 5.5 we discuss the applicability of our study.

5.1 Research expectations and findings

The findings of our study reveal that child-centredness is not overtly practiced in our primary classrooms. From this empirical research we have gained a deeper insight about the teachers' experience in the classroom. Albeit we witnessed elements of child-centred practices, we found that overall teachers have a tendency to revert to curriculum-centred teaching – a system in which lessons are directed by textbooks and led by the teacher.

Based on our personal experience we conjectured that teachers with a knowledge of the LML Process gain a deeper understanding of child-centredness. Our study reveals that our participants acquired skills for placing the child at the centre of the learning process. By listening to the voice of the learner, LML supports teachers to inform their pedagogy according to their pupils' distinct ways of learning – LML Patterns. Thus, we noted that LML sustained a development towards a child-centred approach.

Albeit most educators appreciate the benefits of child-centred education, it is evident that breaking down the barriers that hinder such a pedagogy is challenging. The difficulties highlighted throughout the research include:

- syllabus constraints;
- time constraints;
- pressures of summative assessments;
- inadequate teacher training;

insufficient resources and funds.

The limitations listed above illustrate how the infrastructure of our educational system itself creates an incongruity with the demands of our national policy document on education, the NCF. A fundamental theme of this document is highlighted by Principle 4, which appeals for a child-centred education.

5.2 Recommendations for a child-centred approach

Subsequent to the process of data gathering, its analysis and discussion, we suggest the following recommendations concerning practice issues in fostering child-centred education.

5.2.1 Syllabus content

Based on our teaching experience, we feel that the present primary syllabus is too vast and too repetitive. The participants in our study also uphold a similar view. The NCF (2012) further claims that this view is synonymous with that of the large part of our local educators. "Although stakeholders agree with the principle of learner-centred learning most believe that it can only be successfully implemented if the content of subject curricula is reduced" (NCF, 2012, p. 5). It is pertinent to note that, based on the proposals of the NCF, the current syllabus is being revised.

5.2.2 Class size

Class sizes in local primary schools range significantly. One class might consist of just a handful of pupils, while another might exceed twenty-five pupils. A class consisting of a small number of pupils may fall short of addressing socio-emotional development, thus not fostering a holistic approach. On the other end of the spectrum, a class consisting of a large number of pupils inhibits child-centred practices. The findings of the Ontario study reveal "that smaller classes have the potential to move primary teaching and learning towards more child-centered, child-directed, communicative, exploratory instruction, encouraging students to create learning content and processes along with the teacher (i.e., "co-construction")" (Bascia, 2010, p. 11).

5.2.3 Teacher training

Our findings indicate that many educators lack the sufficient teacher training to implement child-centred practices. Buckling under the external constraints mentioned above, a number of participants also expressed a lack of confidence in detaching from a curriculum-centred approach. We are of the opinion that locally the profession of a teacher is not pertinently esteemed and that as a direct result, not enough is invested into teacher training. We believe that teacher training should engage in substantial preparation that reflects the significance of the profession itself. Student-teachers should be given specific pedagogical training at university. Such a training should provide knowledge on child-centred pedagogical practices. Moreover, it should provide opportunities for potential teachers to acquire skills to effectively implement a child-centred paradigm. Most importantly, we believe that teacher training should be extensive in order to nurture a positive attitude towards child-centred education. Nurturing such an attitude is vital for sustaining a childcentred approach. Furthermore, we are of the opinion that in-service teachers should be given guidance through courses, in-service training, SDP sessions and meetings with professional staff.

5.2.4 Teacher support

Statistics from the Malta Employers' Association (MEA) (2013) show that till last year there were up to three thousand LSAs employed in state schools (Farrugia, September 2013, Government to issue call for recruitment of LSAs 'within days', para. 12). The role of the LSA is to provide support with the teaching and learning process of all the class, in particular with that of the assigned pupil/s. However, our findings reveal that in the most part, LSAs are inclined to focus all their efforts on their assigned pupil/s. In such a scenario, the class teacher is deprived of adequate professional support. Thus, the issue we noted is not due to a lack of human resources but rather, it is the result of a less effective, non-collaborative practice between the class teacher and the LSA. Our teaching experience, as well as our study findings, reveal that a collaborative relationship between the teacher and the LSA has the potential to foster child-centred education.

5.3 Recommendations for the LML process

All the participants in our study expressed a general satisfaction with the LML Process. They were keen to recommend the LML process as a practical, handson tool that supports a child-centred approach. Also informed by our participants' responses, this section highlights suggestions that would perhaps enhance the effectiveness of the LML Process as a teacher support tool.

5.3.1 LML training

During observations, participants expressed a level of anxiety in implementing lessons with LML. This was due to their lack of experience in the process. In our opinion, the LML training should include sessions in which trainees observe seasoned LML educators. We believe that such an experience would benefit the training teachers as they can learn more from experienced educators. On the other hand, merely undergoing the training then being left to fend for themselves in class, is a sink-or-swim system that over time might not sustain LML practice.

5.3.2 Support system

The NCF (2012) states that "newly qualified teachers and others facing new roles, challenges and responsibilities benefit greatly from structured support by more experienced and specifically trained peers" (p. 44). On this account we would like to suggest an online system of support for educators practising LML. Such a support system can take the form of an online forum, which could even facilitate the sharing of lesson plans and ideas or positive experiences.

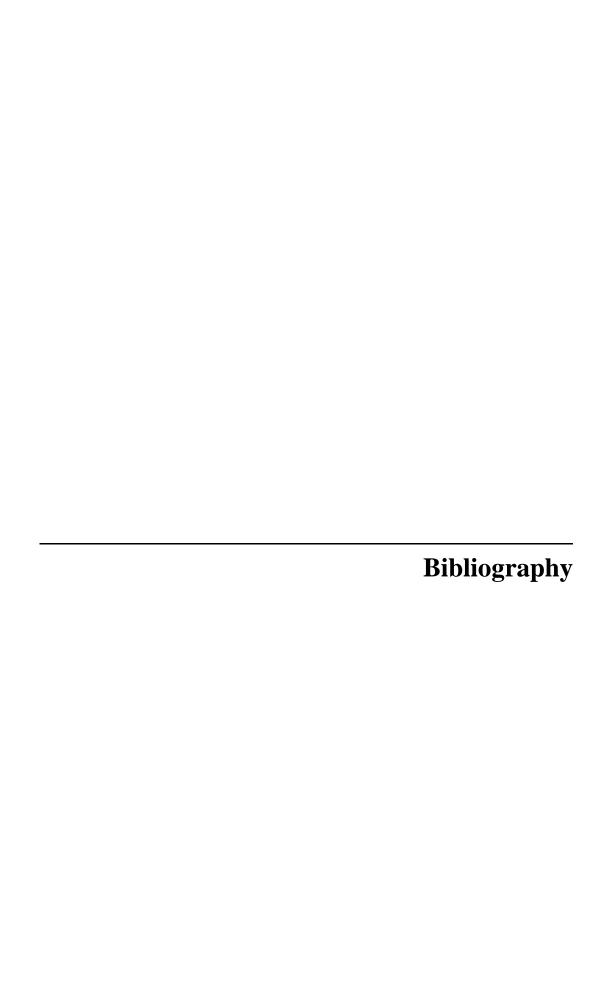
5.4 Limitations and recommendations for further research

In our study we set out to identify child-centred practices and explore how LML can foster the latter. In order to reach the aims of our study we interviewed all the participants before and after the LML course. Thus, a limitation of our study is that the participants are all novices in the LML Process. Similar studies would encourage further research to explore and investigate deeper within this area by studying the pedagogies of teachers experienced in LML. Furthermore, a longitudinal study of the research participants would permit a deeper understanding

of their pedagogical development. Such a study would provide a richer insight on the benefits of the LML Process towards a child-centred approach and if such benefits are sustained.

5.5 Applicability of our study

Professor Wain (2014, April) claims that "mixed ability teaching implies adapting different learning strategies to the needs of the learners rather than teaching a class, thereby respecting their individuality" ("Banding a middle-of-the-road grouping system", para. 15). As discussed in previous sections, the coming scholastic year (commencing in September 2014) will move away from such a paradigm with the introduction of banding. In disagreement with this proposed educational reform, Professor Wain (2014) claims that a banding system will curtail the ability range found in our Maltese primary classrooms. He claims that this may result in a reversion of education towards traditional, whole-class teaching, as opposed to individualised instruction. In this respect, LML will render as a powerful tool in upholding a child-centred approach. The framework of the LML Process allows educators to identify their learners as individuals by recognising their unique Learning Patterns. Thus LML, even in a banding system, should support educators to foster individualised instruction.



Bibliography

- Alston, M., & Bowles, W. (2003). Research for social workers: An introduction to methods. London, UK: Routledge.
- Ariès, P. (1996). Centuries of childhood. USA: Pimlico.
- Aristotle. (1986). De Anima. London, UK: Penguin Books Limited.
- Armstrong, J. S. (2012). *Natural learning in higher education: Encyclopedia of the sciences of learning*. Heidelberg: Springer.
- Baker, B. (1998). Child-centered teaching, redemption and educational identities: A history of the present. *Educational Theory*, 48(2), 155-174.
- Bartolo, P. A., Janik, I., Vera, J., Hofsass, T., Koinzer, P., Vilkeine, V., Calleja, C., Cefai, C., Chetcuti, D., Ale, P., Mol Lous, A., Wetso, G. M., Humphrey, N. (2007). The constructive learning process of diverse learners. In P. A. Bartolo (Ed.), *Responding to student diversity: Teacher's handbook* (pp. 103-144). Malta: University of Malta.
- Bascia, N. (2010). *Reducing Class Size: What Do We Know?* Toronto, Canada: Canadian Education Association.
- Bencini, J. (2011, March 25). Teacher training for mixed ability classes necessary MUT. *The Malta Independent*. Retrieved from http://www.independent.com.mt/articles/2011-03-25/news/teacher-training-for-mixed-ability-classes-necessary-mut-289684/
- Benjamin, A. (2002). Differentiated instruction: A guide for middle and high school teachers. Larchmont, NY: Eye on Education, Incorporated.
- Benjamin, A. (2002). *Differentiated instruction: A guide for middle and high school teachers*. Larchmont, NY: Eye on Education, Incorporated.
- Bennett, C. I. (2003). Comprehensive multicultural education: Theory and practice (5th ed.). Boston, USA: Allyn and Bacon.
- Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*. USA: National Association For The Education of Young Children.
- Beyer, B. K., Brown, A. L., Campione, J. C., Ennis, R. H., Guenther, J., Keefe, J. W., Letteri, C. A., Marzano, R. J., Presseisen, B. Z., Rosenshine, B., Schrag,

- F., Sternber, R. J., & Walberg, H. J. (1992). *Teaching for thinking*. Reston, VA: National Association of Secondary School Principals.
- Biott, C., & Easen, P. (1994). *Collaborative learning in staffrooms and classrooms*. London, UK: David Fulton.
- Blatchford, P., Kutnick, P., & Galton, M. (2003). Towards a social pedagogy of classroom group. *International Journal of Educational Research*, *39*, 153-172.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods.* Boston, USA: Allyn & Bacon.
- Bolton, G. (2005). *Reflective practice: Writing and professional development*. London, UK: Sage Publications Ltd.
- Borg, M. (2014, April 27). The great banding debate. *The Malta Independent*. Retrieved from http://www.independent.com.mt/articles/2014-04-27/news/the-great-banding-debate-4760928259/?archive=20140427000000
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bruner, J. S. (2009). *The process of education: A landmark in educational theory*. USA: President and Fellows of Harvard College.
- Byrnes, J. P. (2001). Cognitive development and learning in instructional contexts (2nd ed.). Boston, MA: Allyn & Bacon.
- Calleja, C. (2005). Differentiated instruction in the primary classroom: A whole school approach for achieving excellence. Malta: Ministry for Education, Youth and Employment.
- Calleja, C. (2005). Differentiated instruction in the primary classroom: A whole school approach for achieving excellence. Malta: Ministry for Education, Youth and Employment.
- Calleja, C., & Borg, C. (2006). Using the technical and confluent patterns first: A recipe of underachievement? In C. Borg, & C. Calleja (Eds.), *Children and Youth at Risk: Narratives of Hope* (pp. 127-151). Malta: Agenda.
- Camilleri, A. (1999). Malta [Teacher Group 2] "Learner autonomy is a dream to be achieved" The Young Teachers' Views. In G. Camilleri (Ed.), *Learner Autonomy The Teachers Views* (pp. 13-18). Virginia, USA: European Centre for Modern Languages. Council of Europe Publishing.

- Cardona, A. (2005). The reflective bus has reached its destination or is it still travelling on? *Reflective Practice*, 6(3), 393-406.
- Coffield, F., Moseley, D., & Ecclestone, K. (2004). Learning styles and pedagogy in post-16 learning: a systematic and critical review. London, England: Learning & Skills Research Centre.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York, USA: Routledge.
- Coombs, J. R. (1994). Equal access to education. *Journal of Curriculum Studies*, 26(3), 281-295.
- Coombs, J. R. (1994). Equal access to education. *Journal of Curriculum Studies*, 26(3), 281-295.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative and mixed Approaches. California, USA: Sage.
- Curtis, S. J. (1965). *An introduction to the philosophy of education* (2nd ed.). UK: HarperCollins Distribution Services.
- Darling-Hammond, L., Meyerson, D., LaPointe, M., & Orr, M. T. (2009). Preparing principals for a changing world: Lessons from effective school leadership programs. NJ, USA: John Wiley & Sons.
- Darwin, C. R. (1871). *The descent of man, and selection in relation to sex* (1st ed.). London, UK: Encyclopaedia Britannica, Inc.
- Dawkins, B. U., Kottkamp, R. B. & Johnston, C. A. (2010). *Intentional teaching: The Let Me Learn classroom in action*. USA: Corwin.
- De Vault, M. L. (1990). Talking and listening from women's standpoint: Feminist strategies for interviewing and analysis. *Social Problems*, *37*(1), 96-116.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). The sage handbook of qualitative research (3rd ed.). London, UK: Sage.
- Dewey, J. (1897). My Pedagogic Creed. The School Journal, 54(3), 77-80.
- Dewey, J. (1963). Experience and education. USA: Collier.
- Dousma, T. (1999). The Netherlands "The students will choose the easy way". In G. Camilleri (Ed.), *Learner Autonomy The Teachers Views* (pp. 19-23).

- Virginia, USA: European Centre for Modern Languages. Council of Europe Publishing.
- Education Act 1988 (2014, April 25). Retrieved from http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&item id=8801
- European Studies Union. (2010). *Student centered learning: An insight into theory and practice*. Bucharest: Education and Culture DG.
- Farrugia, J. (2013, September 16). Government to issue call for recruitment of LSAs 'within days'. *Malta Today*. Retrieved from http://www.maltatoday.com.mt/news/national/29903/government-to-issue-call-for-recruitment-of-lsas-within-days-20130914#.U2IPAyjEVN0
- Fielding, M. (1996). Why and how learning styles matter: Valuing difference in teachers and learners. In S. Hart (Ed.), *Differentiation and the secondary curriculum: Debates and dilemmas* (pp. 79-100). London, UK: Routledge.
- Fishman, S. M., & McCarthy, L. (1998). *John Dewey and the challenge of classroom practice*. New York: Teachers' College Press.
- Flavell, J. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental enquiry. *American Psychologist*, *34*(10), 906-911.
- Flavell, J. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental enquiry. *American Psychologist*, *34*(10), 906-911.
- Flavell, J. H. (1987). Speculation about the nature and development of metacognition. In F. Weinert & R. Kluwe (Eds.), *Metacognition*, *motivation*, *and understanding* (pp. 21-29). Hillsdale, NJ: Lawrence Erlbaum.
- Flavell, J. H. (1987). Speculations about the nature and development of metacognition. In F. E. Weinert & R. H. Kluwe (Eds.), *Metacognition*, *Motivation and Understanding* (pp. 21-29). Hillside, New Jersey: Lawrence Erlbaum Associates.
- Fraser, N. (1997). Justice interruptus: Critical reflections on the "Postsocialist" condition. New York, USA: Routledge.
- Freidus, H. (1997). *The telling of story: Teachers knowing what they know*. Chicago, USA: American Educational Research Association (AERA).
- Galton, M., & Williamson, J. (1992). *Group work in the primary classroom*. London, UK: Routledge.

- Gatt, S. (2000). Problem solving in primary science. *Primary Science Review*, 61, 8-10.
- Gatt, S., & Vella, Y. (Eds.). (2003). Constructivist teaching in primary school: Social studies, mathematics, science, ICT, design and technology. Malta: Agenda Publishers.
- Gillham, B. (2008). *Observation techniques: Structured to unstructured*. Michigan, USA: Bloomsbury.
- Gregory, G. H., & Chapman, C. (2002). *Differentiated instructional strategies: One size doesn't fit all*. California: Corwin Press, Inc.
- Gregory, G. H., & Chapman, C. (2002). *Differentiated instructional strategies: One size doesn't fit all*. California, USA: Corwin Press, Inc.
- Gronlund, N. (1981). *Measurement and Evaluation in Teaching*. New York, USA: Collier-Macmillan.
- Halpern, D. F. (1996). *Thought and knowledge: An introduction to critical thinking*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Harmin, M. (1995). *Inspiring active learning: Strategies of instruction*. New York, USA: Inspiring Strategy Institute.
- Hastrup, K. (1992). Writing the ethnography: State of the art. In J. Okely, & H. Callaway (Ed.), *Anthropology and autobiography* (pp. 115-132). London, UK: Routledge.
- Hesse-Biber, S., & Leavy, P. (2005). *The practice of qualitative research*. London, UK: Sage.
- Holt, J. (1964). How children fail. New York: Dell Publishing Co.
- Hook, S. (1973). *Education & the taming of power*. Chicago, USA: Open Court Publishers.
- Houser, M. L., & Frymier, A. B. (2009). The role of student characteristics and teacher behaviors in students' learner empowerment. *Communication Education*, 58(1), 35-53.
- Huitt, W., & Hummel, J. (2003). Piaget's theory of cognitive development. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State

- University. Retrieved April 2014 from http://chiron.valdosta.edu/whuitt/col/cogsys/piaget.html
- Johnson, D. & Johnson, F. (2003). *Joining together: Group theory and group skills* (8th ed.). Boston: Allyn and Bacon.
- Johnson, D. & Johnson, R. (1990). Cooperative learning and achievement. In S. Sharan (Ed.), *Cooperative learning: Theory and research* (pp. 23-37). New York: Praeger.
- Johnson, D. W., & Johnson, R. T. (1999). Learning together and alone: Cooperative, competitive, and individualistic learning (5th ed.). California, USA: Allyn and Bacon.
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1992). *Advanced cooperative learning (Rev. ed.)*. Edina, MN: Interaction Book Co.
- Johnson, D., Johnson, R., Buckman, L., & Richards, P. S. (2001). The effect of prolonged implementation of cooperative learning on social support within the classroom. *The Journal of Psychology*, 119(5), 405-411.
- Johnson, J. M. (2001). Handbook of interview research: Context and method. In J. F. Gubrium, & J. A. Holstein (Eds.), *In-depth interviewing* (pp. 103-120). London, UK: Sage.
- Johnston, C. A. (1996a, April 17). Many voices one message: A cross-cultural study of student learning processes with implications for students, teachers and reformers. *Paper presented at the International Symposium on Economics, Cultures, Communities, and Schools: Finding the Connection, Examining the Alternatives.* New Jersey, Glassboro: Rowan College.
- Johnston, C. A. (1996b). *Unlocking the will to learn*. California, USA: Corwin Press.
- Johnston, C. A. (1998). Let Me Learn. CA: Corwin Press.
- Johnston, C. A. (2010). *Strategic learning*. Pittsgrove, NJ: Let Me Learn Inc.
- Johnston, C. A. (2002). *Implementing the Let Me Learn Process in K-12*. Turnersville, NJ: Learning Connections Resources.
- Johnston, C. A. (2009). A comprehensive description of the Let Me Learn Process, an advanced learning system including bibliography and lexicon of terms. Pittsgrove, NJ: Let Me Learn Inc.

- Johnston, C. A. (2010). Finding your way: Navigating life by understanding your learning self. Turnersville, NJ: Let Me Learn Inc.
- Johnston, C. A., & Dainton, G. (2005). *The Learning Connections Inventory (manual)*. Turnersville, NJ: Learning Connections Resources.
- Jolliffe, W. (2007). *Cooperative learning in the classroom: Putting it into practice*. London, UK: Paul Chapman Publishing.
- Krathwohl, D. M. (1998). Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches. California, USA: Sage.
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. California, USA: Jossey-Bass.
- Lynch, K., & O'Neil, C. (1994). The colonisation of social class in education. *British Journal of Sociology of Education*, 15(2), 307-342.
- Macionis, J. J. & Plummer, K. (2005). *Sociology: A global introduction*. London, UK: Pearson Education.
- MacLean, L. (2013). *The free animal: Rousseau on free will and human nature*. Canada: University of Toronto Press.
- Mattos, A. M. A. (Ed.). (2009). Narratives on teaching and teacher education: An international perspective. Basingstoke, UK: Palgrave Macmillan.
- Ministry of Education and Employment. (2012). *A national curriculum framework for all*. Malta: Ministry of Education and Employment.
- Montessori, M. (1995). The absorbent mind. USA: BN pub.
- Morrison, K. (1993). *Planning and accomplishing school-centred evaluation*. Dereham, UK: Peter Francis.
- Morse Earle, A. (1993). *Child Life in Colonial Days*. Stockbridge, MA: Berkshire House Publishers.
- Niesz, T., & Krishnamurthy, R. (2013). Bureaucratic activism and radical school change in Tami Nadu, India. *Journal of Educational Change*, 14(1), 29-32.
- Nisbet, J., & Shucksmith, J. (1986). Learning Strategies. London, UK: Routledge.

- O'Brian, T., & Guiney, D. (2001). *Differentiation in teaching and learning: Principles and practice*. London: Continuum.
- O'Brian, T., & Guiney, D. (2001). *Differentiation in teaching and learning: Principles and practice*. London, UK: Continuum.
- Patton, M. C., & Kritsonis, W. A. (2007). Great minds think differently: Sustaining a system of thinking. *Doctoral Forum National Journal for Publishing and Mentoring Doctoral Student Research*, 4(1), 1-15.
- Patton, M. C., & Kritsonis, W. A. (2007). Great minds think differently: Sustaining a system of thinking. *Doctoral Forum National Journal for Publishing and Mentoring Doctoral Student Research*, 4(1), 1-15.
- Patton, M. Q. (1990). Qualitative research & evaluation methods. London, UK: Sage.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Piaget, J. (1972). The psychology of the child. New York: Basic Books.
- Piaget, J. (1990). The child's conception of the world. New York: Littlefield Adams.
- Pollard, A. (1997). Reflective teaching in the primary school: A handbook for the classroom. London, UK: Cassell.
- Pollard, A. (2008). Reflective teaching. London, UK: Continuum.
- Powell, H. C. (1994). Cooperative learning and journal writing in college developmental mathematics. USA: Southwest Texas State University.
- Reagan, G. T., Case, W. C., & Brubacher, W. J. (2000). *Becoming a reflective educator: How to build a culture of inquiry in the schools* (2nd ed.). California, USA: Corwin Press.
- Robson, S. (2006). Developing thinking and understanding in young children: An introduction for students. London, UK: Routledge.
- Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.
- Rousseau, J. J. (1979). *Emile, or On Education: Introduction, translation, and notes by Allan Bloom.* USA: Basic Books.

- Rubin, A., & Babbie, E. R. (2005). *Research methods for social work*. Belmont, CA: Wadsworth/Thomson Learning.
- Schinkel, A. (2007). *Conscience and conscientious objections*. Amsterdam: Pallas Publications.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. London, UK: Temple Smith.
- Shachar, H. (2003). Who gains what from cooperative learning: An overview of eight studies. In R. Gillies & A. Ashman (Eds.), *Cooperative learning: The social and intellectual outcomes of learning in groups* (pp. 103-118). London: RoutledgeFalmer.
- Shayer, M., & Adey, P. (1981). *Towards a science of science teaching*. London, UK: Heinemann.
- Simpson, D. J. (2006). *John Dewey primer*. Bern, Switzerland: Peter Lang International Academic Publishers.
- Singer, D. G., & Revenson, T. A. (1996). *A Piaget primer: How a child thinks*. New York, USA: Plume.
- Steedman, C. (1990). Childhood, culture and class in Britain: Margaret McMillan, 1860-1931. UK: Virago.
- Thelen, H. (1981). *The classroom society: The construction of classroom experience*. London: Croom Helm.
- Thurnston, A., Van de Keere, K., Topping, K. J., Kosack, W., Gatt, S., Marchal, J., Mestdagh, N., Schemeinck, D., Sidor, W., & Donnert, K. (2007). Peer learning in primary school science: Theoretical perspectives and implications for classroom practice. Electronic Journal of Research in Educational Psychology, 5(3), 477-496. Retrieved from http://www.stipps.info/domains/stipps.info/public_html/documents/articlepee rlearningSTIPPS.pdf
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction: Understanding by design.* USA: ASCD.
- Tunnicliffe, S.D. (1990). *Challenge science: Living things*. Oxford, UK: Basil Blackwell.

- Tunnicliffe, S.D. (1992). *Challenge science: Earth, air and space*. Oxford, UK: Basil Blackwell.
- Tzuo, P. W. (2007). The tension between teacher control and children's freedom in a child-centered classroom: Resolving the practical dilemma through a closer look at the related theories. *Early Childhood Education Journal*, *35*(1), 33-39.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wadsworth, B. J., & Piaget, J. (2004). *Piaget's theory of cognitive and affective development* (5th ed.). Boston, MA: Allyn & Bacon.
- Wain, K. (2014, April 27). The great banding debate. *The Malta Independent*. Retrieved from http://www.independent.com.mt/articles/2014-04-27/news/the-great-banding-debate-4760928259/?archive=20140427000000
- Wood, D., & Middleton, D. (1975). A study of assisted problem-solving. *British Journal of Psychology*, 66(2), 181–191.
- Wood, D., & Middleton, D. (1975). A study of assisted problem-solving. *British Journal of Psychology*, 66(2), 181–191.
- Wood, D., & Wood, H. (1996). Vygotsky, tutoring and learning. Oxford Review of Education, 22(1), 5-16.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. Journal of Child Psychology and Child Psychiatry, 17(2), 89–100.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. Journal of Child Psychology and Child Psychiatry, 17(2), 89–100.
- Young, I. M. (1990). *Justice and the politics of difference*. Princeton, NJ: Princeton University Press.
- Zammit Marmarà, D. (2001). The Ideological Struggle over Comprehensive Education in Malta. In R. G. Sultana (Ed.), *Yesterday's schools: Readings in Maltese educational history* (pp. 242-270). Malta: PEG.
- Zelizer, V. A. (1985). Pricing the priceless child: The changing social value of children. New York: Basic Books.

Appendix 1
Consent form

Appendix 1: Consent form

Consent form

Dear,	
We would like to express our deep gratitude and appreciation our study.	ation for your participation
The submission of this dissertation aims at exploring centredness with regards to our Maltese Primary classroom constituent part of the B.Ed course that we are reading at the course that the	oms. It is an important and
As we have already related to you through an e-mail, structured interviews, one prior the initiation of the Le second after the completion of the said course. With your to record the interviews. The recordings will be used sol research study. When the process of transcribing is completed.	t Me Learn course and a permission, we would like ely for the purpose of the
 Before signing this letter of consent, we are clearly ensuring. No harm and distress to the participants. Voluntary participation. Right to withdraw from the study without the needs so and without any consequences. Confidentiality and anonymity. Recordings of the interviews are used only and example with the process of transcribing is done, all the resonance of the confidence of the process of transcribing is done. Right to ask questions about the research. 	I to give reasons for doing acclusively for the research.
that the signed letter of consent will not show in any part of	f the dissertation.
Martin de Battista	Participant
Marilyn Portelli	Date

Appendix 2
Interviews

Appendix 2: Interviews

Interview questions (1)

- 1. How long have you been in the teaching profession?
- 2. How long have you been at this school? Is it a private, Government or church school?
- 3. What year group are you teaching?
- 4. How long have you been teaching this year group? Have you ever thought any other year group(s)?
- 5. What teacher training have you undergone? (E.g. B.ED course at the University of Malta).
- 6. What would you say is the main concern informing your pedagogy?
- 7. What is/are your priority/priorities in class regarding the teaching and learning objectives?
- 8. What ideology defines your teaching techniques?
- 9. We hear a lot about child-centred pedagogies in education, what are your views about this pedagogy?
- 10. Who are the theorists that inspire you, if any?
- 11. How do you apply the method of teaching (that is inspired by the theorists mentioned in Q.10) in your classroom?
- 12. How did you learn about the Let Me Learn course?
- 13. What do you know about the Let Me Learn Process?
- 14. Was it your initiative to undertake the course? Or your employer's persuasion?
- 15. What are your expectations of this course?
- 16. What would like to achieve through this course?
- 17. What position do you see yourself in with regards to the child-centred teaching (i) now and (ii) after undertaking the course?
- 18. Is there anything you would like to add with regards to your experience in class and/or the Let Me Learn Process?

Mistoqsijiet ghall-intervista (1)

- 1. Kemm ilek fil-qasam tal-edukazzjoni?
- 2. Kemm ilek f'din l-iskola partikolari?
- 3. Liem sena qieghed/qieghda tghallem?
- 4. Kemm ilek tgħallem lil tfal ta' din l-eta'? Ġieli għallimt snin oħra?
- 5. X'tip ta' tahriġ kellek? (Eż. Il-kors tal-B.ED fl-Universita` ta' Malta).
- 6. Liema huma dawk il-linji ta' ħsieb li jiffurmaw il-pedagoġija tiegħek fil-klassi?
- 7. X'inhuma l-prioritajiet tiegħek fil-klassi ma' dak li għandu x'jaqsam it-tagħlim?
- 8. Liem ideoloģija/ideoloģiji thaddan fil-klassi li jenfasizzaw il-metodu/i tat-tagħlim?
- 9. Fl-edukazzjoni nisimgħu ħafna dwar pedagoġiji li jpoġġu lit-tifel fiċ-ċentru tat-tagħlim (*child-centred pedagogies*). X'inhu l-ħsieb tiegħek dwar din il-pedagoġija?
- 10. Liem huma t-teoristi li jinfluwenzaw il-mod ta' kif twassal it-taghlim fil-klassi?
- 11. Kif tapplika dawn it-teoriji fil-klassi tiegħek?
- 12. Kif sirt taf bil-kors ta' Let Me Learn?
- 13. X'taf fuq il-process ta' Let Me Learn?
- 14. Kienet inizjattiva tiegħek li tattendi dan il-kors? Jew bagħtuk mill-post tax-xogħol?
- 15. X'inhi l-aspettativa tiegħek dwar dan il-kors?
- 16. X'tixtieq tikseb minnu dan il-kors?
- 17. F'liema pozizzjoni tara lilek innifsek fir-rigward *child-centred teaching* (i) issa u (ii) wara li tattendi dan il-kors.
- 18. Tixtieq iżżid xi ħaġa ma' dak li diġa ddiskutejna fuq l-esperjenza tiegħek fil-klassi jew fuq il-proċess ta' *Let Me Learn*?

Interview questions (2)

- 1. How did you find the Let Me Learn course?
- 2. In a few words, how would you describe the Let Me Learn Process?
- 3. Differentiation is prominent in today's education discourse. What are your views about this? (What do you understand by differentiation? How do you implement this in class?)
- 4. Today we hear a lot about assessment for learning. What are your views about this? (What do you understand by assessment for learning? Do you implement this in class? If so, how?)
- 5. Having attended the course, how does LML help you implement differentiation in class?
- 6. You had mentioned that you develop your teaching techniques: changing, discarding or keeping strategies that are ineffective or effective, respectively. Do you have a particular custom or routine of reflective practice to inform such developments? (Do you keep a professional diary? Do you reflect daily, weekly or irregularly?)
- 7. What are the theories that underlie your reflective practice? (What are the lines of thought that guide your thinking when reflecting upon your practice?)
- 8. Montessori highlights the vital role of education in allowing the learner to be free – the power of teaching ones' self. Having attended the course, how does LML help you implement this theory in practice?
- 9. Having attended the course, and in making use of the child's potentials as you mentioned before, how do you implement pair or group work in class?
- 10. After undertaking the course, what position do you see yourself in with regards to child-centred education?
- 11. Would you recommend the course?
- 12. Is there anything you would like to add with regards to your LML experience in class?

Mistoqsijiet ghall-intervista (2)

- 1. X'deherlek mill-kors tal-LML?
- 2. Fi ftit kliem, kif tiddeskrivi l-process tal-LML?
- 3. Istruzzjonijiet individwali (*differentiation*) huwa metodu prominenti ħafna llum il-ġurnata fl-edukazzjoni. X'inhu l-ħsieb tieghek dwar dan? (X'tifhem b'*differentiation*? Kif timplimentah fil-klassi?)
- 4. Illum il-ġurnata nisimgħu ħafna dwar *assessment for learning*. X'inhu l-ħsieb tiegħek dwar dan il-metodu? (X'tifhem b'*assessment for learning*? Timplimentah fil-klassi? Jekk iva, kif?)
- 5. Wara li attendejt dan il-kors, kif ser jgħinek il-LML biex tuża' b'mod effettiv *differentiation* fil-klassi?
- 6. Meta tkellimna fl-ewwel intervista kont semmejtli li matul is-sena tibqa' tiżviluppa l-metodi tat-tagħlim li tħaddan fil-klassi, skond kemm ikunu effettivi jew le. Tuża', xi metodu partikolari biex tirriffletti? (Iżżomm xi djarju fejn turi dawn l-iżviluppi? Kull kemm tirrifletti?)
- 7. Liema huma dawk it-teorijji li jinfluwenzaw din il-prattika ta' riflessjoni? (Liema huma dawk il-linji ta' ħsieb li jigwidawk, waqt li qed tirrifletti fuq dawn il-metodi tat-tagħlim?)
- 8. Fit-toeriji tagħha Maria Montessori, tenfasizza l-irwol vitali tal-edukuazzjoni, dak li tħalli lit-tifel fil-liberta' ittih iċ-ċans li jitgħallem waħdu. Wara li attendejt dan il-kors, kif ser jgħinek il-LML biex tuża' din it-teorija fil-prattika?
- 9. Wara li attendejt dan il-kors, u kif semmejtli diġa, qed tfittex li tiżviluppa ilpotenzjal tat-tifel, kif timplimenta attivitajiet fil-klassi li jirrikjedu t-tfal biex jaħdmu f'pari jew fi gruppi?
- 10. Issa li spiċċajt il-kors, f'liema pożizzjoni tara lilek innifsek rigward *child-centred education*?
- 11. Tirrikomandah lill-kollegi tieghek dan il-kors? Ghaliex?
- 12. Tixtieq iżżid xi haġa rigward l-esperjenza tiegħek fil-klassi fejn jidħol tagħlim u l-użu tal-LML?