

**The Let Me Learn Process:
An Agent for Intentional Teaching and Learning**

Tabone Rebecca

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ABSTRACT

Tabone Rebecca

The Let Me Learn Process: An Agent for Intentional Teaching and Learning.

This dissertation focuses on what is intentional teaching and learning and on how the Let Me Learn (LML) process contributes to this. One characteristic of an effective teacher is 'intentionality' – doing things with a purpose and goal in mind. Teachers thus need to understand how students construct and make their learning process work best for them. Students do this by using their unique combination of all the four learning patterns; Sequence, Precision, Technical Reasoning and Confluence. Structured participant observations of teachers, who received training in the LML Training Programme, are carried out in four primary classrooms. The classroom environment, teacher effectiveness and the teaching and learning process are observed and analysed in depth and in relation to intentional teaching and learning characteristics. The data collected from the observation sessions is corroborated with interviews with the same four teachers and with questionnaires to pupils observed in Grade 4 and Year 5. Results indicate that teaching with intention is a way to reach the *unreachable* learners. In learning intentionally, the student becomes an independent and responsible learner. This facilitates the path to life-long learning success. Reflective practice and the teacher's own personal will and beliefs are additional agents in developing intentional teaching and learning.

Bachelor of Education (Honours)

May 2009

Key Words:

Let Me Learn Process®	Intentional Teaching	Intentional Learning	Reflective Practice	Teacher Effectiveness	Educational Psychology
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Author's declaration

I, the undersigned, certify that '*The Let Me Learn Process: An Agent for Intentional Teaching*' is my own work unless otherwise referenced or acknowledged. All sources that have been used have been acknowledged by correct and complete references. This study has never been submitted for any other degree or exam at any other educational institution, nor published in any other means.

This dissertation is presented in part fulfilment of the requirements of the Bachelor of Education (Honours) at the University of Malta.

Rebecca Tabone

Dedications

I want to dedicate this dissertation to...

The child who *wants to be listened*.

My beloved parents, for instilling in me a curiosity and love for learning and confidence and determination to accomplish my goals.

All those who value and believe in the richness of teaching and learning.

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I thank God, who gave me health, wisdom and strength to finalize this research study.

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Chapter 1

Introduction

Introduction

*“There is nothing more liberating and supporting for students
...than to know how they learn and be given permission to
learn in those ways!”*

(Lazar, 1997 in Johnston, 1998)

1.1 Background Information

When students are aware of how they learn, they start creating personalised learning strategies to use them in their own preferred way. In doing so, they facilitate their learning journey and clear the pathway to achievement and excellence. Students learn best when they are taught in the way they learn and if their learning processes match the teaching and schooling processes. It is only in this way that they can experience success.

To understand and find out how students learn, teachers should start by listening to their voice – the voice of learning. If this voice is not recognised and listened to, students will stop communicating and create learning barriers. Consequently, their learning potential will not be fully maximised in their most preferred way (Johnston, 1998).

This brings to light that effective teaching starts by listening to the unique voice of each and every learner in the classroom. In fact, this is at the heart of the Let Me Learn (LML) process. The LML process offers the necessary tools needed to understand one’s own learning process and patterns. Before attempting to understand the students, teachers should start by recognising and knowing their own learning processes. In recognising and understanding the students’ learning patterns, teachers will be able to plan relevant learning experiences for the benefit of all learners. This brings about success and higher achievement (Dawkins, 2009).

This study looks at teachers who received training in the Let Me Learn programme and how they put the skills and knowledge gained in practice to teach with intention and to help children develop into intentional learners by instilling in them the skills of meta-awareness, meta-cognition, and reflection. It also highlights how these teachers, create effective classroom environments which are conducive to learning, accepting; wherein all learners are valued and included irrespective of their learning patterns, nurturing; in which the learners' learning patterns are developed, and supportive; wherein the learners are supported and encouraged to learn independently.

The teacher is a vital instrument in achieving intentional teaching and learning. Intentional teaching and learning start with listening to the voice of each learner which is a "distinct voice with a clear message – a message that is powerful and forthright. It needs only to be captured, amplified and listened to" (Johnston, 1998, p.40). It is the aim of this study to bring out how listening to the voice of the learners, awareness in the Let Me Learn process and the teacher's approach and strategies in-use will foster intentional teaching. In view of this, the dissertation is guided by three main research questions;

- How is the Let Me Learn process used in practice to achieve intentional teaching and learning?
- Are there are any other skills and/or strategies apart from the Let Me Learn process which are needed to be able to act with intention?
- What are the benefits pertaining to intentional teaching and learning?

1.2 Setting of the study

Research is carried out in two local primary schools – a Church and a State school. The in-class observations are implemented in four classrooms of teachers who received training in the Let Me Learn programme. The classrooms consist of Grade 2, 3 and 4 in a Church school and Year 5 in a State school. To

corroborate data, interviews are conducted with the same four teachers where personal opinions and details from the observations are explained in greater depth. Furthermore, a questionnaire based on children's learning processes and preferences in the light of the Let Me Learn process is given to pupils in Grade 4 and Year 5. This is done to further confirm and support the data emerging from the observation sessions and to triangulate data. Further details of this and of the research methods used are included in Chapter 3.

1.3 Organisation of the study

This dissertation is organised in a total of another five chapters: Chapter 2 gives a detailed review of literature concerning brain research, the Let Me Learn theory and Process, intentional teaching and learning and reflective practice. Chapter 3 explains the process of data collection and what methods are used. Chapter 4 includes the findings emerged from the observation sessions and questionnaires. Chapter 5 contains the analysis and discussions following the reporting of data and findings. Chapter 6 concludes the main ideas of this study, includes the limitations encountered and suggests ideas for further research.

1.4 Conclusion

The ultimate goal of education is to promote and enhance learning for each and every learner. However, in reality, is each and every learner being listened to, reached and empowered? Intentional teaching and learning in the light of the LML process might be an answer to this question. Improving students' learning and facilitating the journey toward their learning success, depends on acknowledging and understanding who the individual learners are in the classroom. This brings out the importance of 'listening to their voice of learning' as it is within listening to this voice that the key to unlock the students' will to learn is found (Johnston, 1998).

The main purpose of this dissertation is thus to evaluate how the LML theoretical framework can be an agent for intentional teaching and learning and how this contributes in making learning relevant and meaningful 'for all children to succeed' (NMC,1999).

It is hoped that the results and findings which emerge from this study, answer the research questions and more importantly encourage other teachers to start listening and responding to the voices of their students and make them flourish throughout their learning journey.

Chapter 2

Literature

Review

Literature Review

2.1 Introduction

Effective teaching is the basis of all successful learning therefore, the necessity, and importance of having professional and effective teachers are undeniable. This is also outlined throughout the National Minimum Curriculum (NMC, 1999). While it is complex to define in general terms what makes effective teachers, Slavin (2000) claims that, one attribute that seems to constitute effective teachers is intentionality; meaning, doing things on purpose and with full awareness.

Effective teachers do not only offer education but seek to ensure learning (Darling-Hammond, 1996). This can only be achieved if teachers know and understand their pupils, their learning processes and what works best for them. In saying this, teachers need to understand what goes on in the learner's mind when learning is occurring (Johnston, 1998). This is the first step toward intentional teaching and learning.

2.2 What goes on in the learners' mind?

All forms of learning take place in the mind (Tileston, 2005). Learning consists of and occurs through a continuous synchronization of three mental processes namely: cognition (thinking), conation; (doing) and affectation; (feeling). These form the basis of the Interactive Learning Model (ILM) as illustrated in Figure 1 (Johnston, 1994).

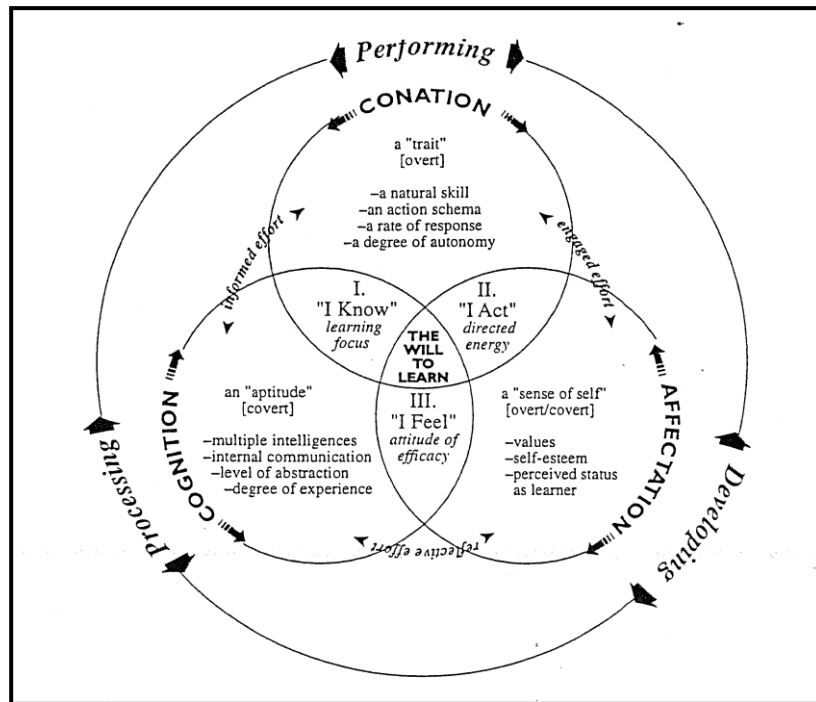


Figure 1: The Interactive Learning Model (Johnston, 1994b)

Learning always occurs through this tripartite process thus equal importance should be given to each of the three above-mentioned elements. These three processes interact together to form four distinctive learning patterns which are; the Sequential pattern, the Precise pattern, the Technical Reasoning pattern and the Confluent pattern (Johnston, 1997a). Taken together, they compose an orchestra of many voices – the learners’ voice (Jorgensen, n.d.a).

2.2.1 The Four Learning Patterns

The four learning patterns which constitute the LML process, exist in all individuals however to varying degrees. Every learner uses a different unique combination of these patterns. Each pattern is distinguished by a set of characteristics which are illustrated in Table 2.1 below.

<p>Sequence</p> <ul style="list-style-type: none"> • Organize information; • Break tasks down into steps; • Make lists; • First plan, then act; • Feel frustrated when plans keep changing. 	<p>Precision</p> <ul style="list-style-type: none"> • Research information; • Ask lots of questions; • Challenge doubtful statements and ideas; • Feel good when correct; • Feel frustrated when people do not share information with me.
<p>Technical Reasoning</p> <ul style="list-style-type: none"> • Seek concrete relevance; • Only want as much information as I need; • Get my hands on; • Solve the problem; • Enjoy knowing how things work; • Feel good when I am self-sufficient; • Feel frustrated when tasks have no real world relevance. 	<p>Confluent</p> <ul style="list-style-type: none"> • Think outside-the-box; • Take risks; • Not afraid to fail; • Talk a lot about things; • Might start things and not finish them; • Enjoy energy; • Enjoy a unique challenge; • Do not enjoy having my ideas criticized

Table 2.1: The Four Learning Patterns (Calleja, 2005)

2.2.2 The Learning Connections Inventory

The Learning Connections Inventory (LCI) is a valid and tangible tool developed by Johnston and Dainton (1996b) that gathers information about how individual learners learn. It also measures to which extent each individual learner uses the four learning patterns mentioned above. The LCI consists of twenty-eight statements which the students respond to by choosing one of the five choices given, namely; '*never*', '*almost never*', '*sometimes*', '*almost always*' and '*always*'. The inventory ends with three open-ended questions where the students write their own answers in words. This helps to further validate and support the scale scores (Johnston, 1998). Finally, the scores within each scale

are categorized into three categories; *'Avoidance'*, *'Use as needed'* and *'Use First'* (Calleja, 2005).

2.3 The Let Me Learn Process

The Let Me Learn (LML) process starts with listening to the voice of the learner, understand it and act with and upon it. This is the very first step in meeting the needs of all children. The next step is to have students understand how their learning patterns can work for them and how to overcome obstacles in their learning journey (Johnston, 1998). In doing so, students will be empowered to unlock their will to learn, which is vital to successful education.

When both teachers and students know and are aware of each other's learning patterns, they are empowered to make sense of learning and act in a way that yields success. As a result, they shift the way from taking ad hoc intuitive actions to using informed, deliberate and intentional behaviors. Thus, the LML is a powerful process in making both teaching and learning intentional (Johnston, 1996).

2.4 The Let Me Learn Process in the Primary Classroom

2.4.1 The Awareness Session

As the name implies this is an introductory session wherein the LML process is introduced to the pupils in class. The teacher or LML mentor, reads a story titled; *'Erbat lħbieb f'Wied Lelluxa (Four friends in Lelluxa's Valley)* which tells a story of four animal characters and what they did for a class project. Both the story and the characters promote the idea of difference. These help children understand that although everyone learns differently, everyone is useful and important.

2.4.2 The four Let Me Learn characters; Ġeru, Fina, Faru and Żringi

As outlined above, four characters each representing a learning pattern were developed namely; Ġeru (Sequence), Fina (Precision), Faru (Technical Reasoning) and Żringi (Confluence). These are used with children to facilitate understanding of the learning patterns. Following, is an illustration and a brief description of each character (Figure 2).



Figure 2: The four LML Characters

Ġeru: a highly organized puppy representing the Sequential pattern. He needs to have a lot of directions and a plan, keeps everything neat and tidy and asks a lot of questions so as to be sure.

Fina: a highly precise and meticulous tortoise. She is a book-worm, likes to write and asks questions to obtain more information. Fina represents the Precise pattern.

Faru: a highly delightful mouse. He likes to get involved in hands-on work, likes to play and work with tools, likes to build models and prefers to work alone. He tries to avoid reading and writing. Faru represents the Technical Reasoning pattern.

Žringi: a highly vivacious and lively frog. She likes to be very original when doing things – she is always inventing and coming up with a lot of ideas. Žringi likes to imagine, likes to paint, loves to try new things and starts working before everyone else as she does not like to wait for instructions or directions. Žringi represents the Confluent pattern.

After the awareness session, the teacher administers the LCI with the pupils, validate their scores and share the information with them to help them develop a personal understanding of their learning patterns and how they learn best. In knowing how their students learn, teachers discover that the LML makes sense as it “provides language, description, analysis, insight and meaning to the feelings [they] have had about the learners” (Osterman and Kottkamp, 2004, p.160).

2.4.3 The meta-cognitive tools

The LML process offers tools to help pupils analyse what patterns they need to use when dealing with learning tasks or situations. This helps in making teaching and learning intentional. Following is a brief explanation of two meta-cognitive LML tools.

- The Word Wall: a chart displaying verbs, nouns, and adjectives which are commonly used in teaching and learning instructions; for example; ‘list, plan, organize’ – (Sequence), ‘label, explain’ - (Precision), ‘build,

tools' - (Technical Reasoning), 'imagine, ideas' - (Confluence). The learners examine the key words and then use the Word Wall to identify the patterns needed (Osterman & Kottkamp, 2004).

- Power/ Strategy Card: a card with key learning strategies to help learners identify which are their strong and weak learning patterns. Thus, the learner would know which patterns they need to tether or forge to succeed in a learning situation (Jorgensen, n.d.b).

2.5 Defining intentional teaching

As defined by Osterman & Kottkamp (2004), intentional teaching means;

“...to teach with **full awareness** of children as learners and with a **conscious** effort to support them in using their unique, very personal learning patterned operations matrices” , that is, their learning patterns. (p.163)

Intentional teaching does not happen by accident (Epstein, 2007). Intentional teachers “are constantly thinking about the outcomes they want for their students and about how each decision they make moves children toward those outcomes” (Slavin, 2007, p.7). In view of this, intentional teaching is also reflective teaching as intentional teachers think and reflect on their practice to find ways to improve in meeting all learners’ needs and drive them toward success. Teachers deliberately plan lessons and activities keeping in mind what motivates and frustrates their students in learning. They also seek to use strategies and techniques to help their learners achieve and succeed in their own learning process (Sims & Sims, 2006). Johnston (2005) developed a set of intentional teaching strategies for each learning pattern which teachers can use to teach with intention, as illustrated in Table 2.2 overleaf.

Sequential	Precision	Technical	Confluent
<p>Make sure that all directions are clearly stated step-by-step. Indicate how this may be carried out.</p>	<p>Make sure that all the information that the student needs is given. Give numerous written opportunities for child to respond/ be assessed.</p>	<p>Provide the student with opportunities to learn through doing.</p>	<p>Provide the student with opportunities to be assessed by taking risks or being original.</p>
<p><u>Suggestions:</u></p> <ul style="list-style-type: none"> ✓ Repeat the directions more than once and slowly. ✓ Do not change directions mid-stream. ✓ Provide a sample of what is expected. ✓ Do not proceed in the lesson until everyone is at the same point in time. ✓ Do lists on the board, at the top of the activity handout, on the test/assessment paper. ✓ Allow adequate time to complete the task/ lesson and to allow the child to develop a plan. ✓ Allow adequate time for students to check/ go over their work. ✓ Allow adequate time for students to edit/ polish their work. 	<p><u>Suggestions:</u></p> <ul style="list-style-type: none"> ✓ Explain what will be on the test. ✓ Show/ explain where all of the information can be found in the book/ material handed out/ resources being used. ✓ Allow extra time for the child to look up/ research additional information. ✓ Explain things clearly by using many details. ✓ Have students take notes or copy them down. ✓ Provide activities that help to reinforce information they need to know. ✓ Allow for ample questions. 	<p><u>Suggestions:</u></p> <ul style="list-style-type: none"> ✓ Provide hands-on activities. ✓ Give little notes whenever possible/ be succinct. ✓ Minimize book work whenever possible as well as written assignments. ✓ Provide ample tools/ materials that can be used to build things with which to reflect about their knowledge. ✓ Provide challenging and meaningful real-world projects that require problem-solving. ✓ Give the child opportunities to work alone. ✓ Provide ample breaks. ✓ Accept short but to-the-point answers whether written or verbal. 	<p><u>Suggestions:</u></p> <ul style="list-style-type: none"> ✓ Encourage new ideas of approaches to tasks. ✓ Allow the child to use his/her imagination when assessing problem-solving. ✓ Limit number of rules and regulations to follow for assignments and learning opportunities. ✓ Allow the child to get started and ask questions later on and as needed. ✓ Provide fun and creative ways for learning. ✓ Allow assignments to be done in a unique way. ✓ Allow the child to do a role-play or give a speech that reflects what was learned.

Table 2.2: Intentional Teaching Strategies (Johnston, 2005)

In most cases, teachers present strategies which target the Precise and Sequential patterns (Borg and Calleja, 2006). This limits those learners who do not use their Precision and Sequential patterns on a first level basis. As a result, these students detach themselves from learning and are seen by the teacher as the unreachable students who do not want to learn (Johnston, 1998). However, such labeling and assumptions given are often incorrect as these students might be trying to communicate that the learning presented to them is not relevant and meaningful (Kottkamp & Silverberg, 2006 in Borg & Calleja, 2006). Therefore, when students experience such a situation, they resist teaching and learning (Sultana, 1997). As a result, the Technical and Confluent learners tend to be more at-risk than other learners who present themselves as Sequential and Precise processors (Borg & Calleja, 2006). Intentional teachers, will be able to identify such learners who tend to be excluded and modify their teaching accordingly so as no learner is left behind.

2.5.1 Intentional learning

“Intentional learning is the learner response to intentional teaching” (Osterman & Kottkamp, 2004 p.163). Vosniadou (2003) and Sinatra (2003), describe intentional learning as deliberate and purposeful learning under the learners’ full conscious control. Bereiter and Scardamalia (in Glaser & Resnick, 1989) add that “intentional learning is an achievement, not an automatic consequence of human intelligence” (p.366). Intentional learning is *achieved* as it is a whole process – a process of reflection and self-discovery in itself. Like intentional teaching, intentional learning cannot be achieved if reflective practice is absent.

In learning with intention, the learner plays a “self-initiated, goal-directed, purposive role in the learning process” as he or she needs to be constantly aware of what is happening, how and why (Sinatra, 2000, p.35). Such

awareness empowers learners to select and use strategies with intention to make the learning process work for them.

In intentional learning, the learners analyze tasks to determine what learning patterns are needed for that particular task; known as ‘Task Analysis’. This is illustrated in Figure 3. The Power Card, the Word Wall and the four characters also help learners become intentional as such tools encourage meta-awareness, meta-cognition and reflective thinking. These help learners to think and act deliberately thus will be able to overcome the learning roadblocks they encounter throughout their learning journey (Osterman & Kottkamp, 2004).

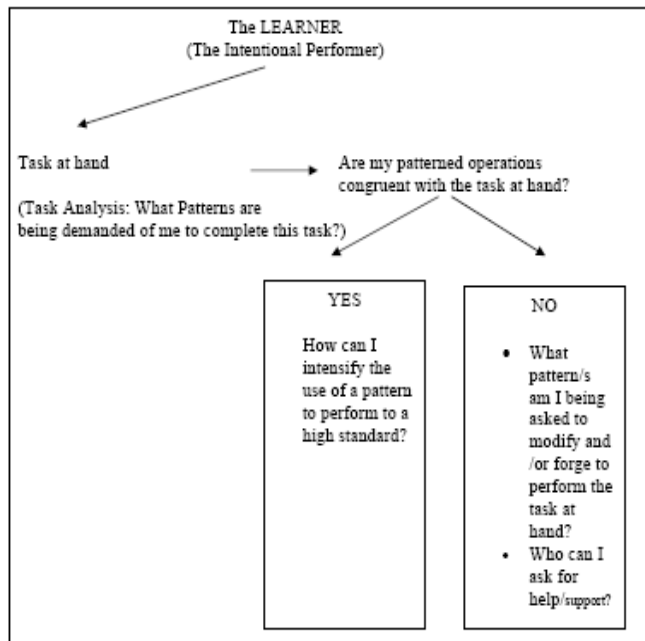


Figure 3: Task Analysis (Calleja, 2005)

2.6 The Let Me Learn Process - an agent for Intentional Teaching and Learning

The principal goal of the LML process is to enable the teacher to teach with intention and the learner to learn with intention. The LML process facilitates intentional teaching and learning as it encourages teachers and pupils to engage in meta-cognitive processes (Newell, Dahm, Harvey & Newell, 2004). They are

able to do this by using the meta-cognitive tools promoted by the LML process itself. Meta-processing as defined by Osterman & Kottkamp (2004) is “the internal self-talk of learning that occurs whenever a learner is confronted with a learning task” (p.165). Meta-awareness consists of the learner’s knowledge of self as a learner. When learners are engaged in this, they feel that they are active learners, who “can use their learning power with intention and deliberateness” (Osterman & Kottkamp, 2004, p.167).

The LML, gives learners a voice through which they can communicate their internal self-thoughts, what activities stimulate them and what they find challenging. In this way, learners are developing the attitude, skills and strategies to become intentional life-long learners (Johnston & Johnston, 1997b).

2.7 The Process of Reflective Practice

Teaching and learning cannot be intentional without reflective practice. Both teachers and students should engage in the process of reflection as this gives them “information about situations and events, emotions, actions and outcomes” (Osterman and Kottkamp, 2004, p.182). As a result, they continue to develop understanding of themselves and others.

Informed reflective practice helps teachers to make intentional, purposeful decisions and strategies that promote student learning (Pollard, 1997). According to Dewey (1933, in Hattie, 1999), “reflection limits the *impulsive* nature of teaching and enables the teacher to act with intention and deliberation” (p.10).

Reflective practice together with awareness in the LML process create effective intentional teachers who will bring about success and accountability in education at large.

2.8 Conclusion

The LML process serves as an agent for intentional teaching and learning. One of the factors that contribute to this is that in each LML task, the learners engage in a process of reflection wherein they collect information of their performance, assess it in relation to the deliberately-planned learning goals, and reflect on what strategies need to be used and/or modified. In this way, learners engage in a process of self-awareness and get to know and understand what they are doing and what is happening, hence learning with intention. In intentional teaching and learning, the focus is put on the process of learning rather than the final mark, grade or product which are often unproductive.

Intentional teachers and learners, who are proficient in intentionally mastering teaching and learning, are both models “of educational accountability” (Johnston, 2000, p.167).

Chapter 3

Methodology

Methodology

3.1 Qualitative Research

A triangulation method of qualitative and quantitative research methods is used in this study to collect the necessary information and data needed. Triangulation of data helps to corroborate and support the validity of the outcomes and results. The research methods used are; observations, interviews and questionnaires. The researcher feels that this tripartite method is the best approach to collect the desired data as “triangulation is a powerful way of demonstrating concurrent validity, particularly in quality research” (Campbell & Fiske, 1959 in Cohen, Manion & Morrison, 2000, p. 112).

3.2 Ethical Issues

Prior commencing the actual field-work sessions in the selected schools, all the necessary consent forms and permission from the Education Department (for the State school) and the Curia (for the Church School) are collected. Once consent is granted and issued, the researcher contacts the Heads of both schools and explains the purpose of the study. During the meetings, the Heads are informed that the research include observation sessions with teachers who received the Let Me Learn training programme, followed by interviews and questionnaires for pupils. Following this, both Heads of schools appoint the teachers’ names whom the researcher contacted in order to schedule dates for the observations.

The names of the schools under study are not mentioned, however it is pointed out that one is a state school while the other a church school. The researcher

wants that the teachers participating in the study feel confident and comfortable as much as possible, hence confidentiality is guaranteed as real names are not used throughout the study. Instead, pseudonyms are adopted to protect the identity of the participant teachers. Protecting the 'anonymity of research participants and keeping the research data safe should be fulfilled at all costs' (Frankfort-Nachmias & Nachmias, 1992). Pseudonyms are also used when reference to the pupils is made.

Furthermore, the researcher values voluntary participation, that is, the teachers are in no way coerced into participating in the research but will do so freely. They are also informed of their right to withdraw from the study at any time they want (Cohen, Manion & Morrison, 2000). In doing so, the researcher assures that the participants are under no pressure to participate thus resulting into more genuine and valid results.

3.3 Research Sample

The main aim of this research is to investigate in practice whether the Let Me Learn as a holistic process is an agent for intentional teaching and learning. It also aims to explore how the physical, social and cognitive environment of the classroom and the teacher *per se* contribute to the diverse needs of all the pupils' learning patterns. In order to reach these aims, the researcher observes a sample of classroom population and teachers who received training in the LML programme (Mc Neill & Chapman, 2005). The pupils' age-group targeted for this study is between the ages of six and ten, that is, from Year 2 to Year 5 so as to obtain a wider spectrum of data.

3.4 The Observations

For the purpose of this study, the observations are of the participant type, as this method helps to understand the complex nature of classrooms (Patton,

2002). Becker and Geer (1970) also assert that participant observation is the most comprehensive of all types of research methods as it gives detailed information about the event under study than data gathered by any other method. However, the researcher does not over-participate so as not to disturb the natural flow of the classroom setting, the teacher and the pupils themselves.

The observation sessions are guided by three main themes namely;

- Theme 1: The Classroom Environment and Organisation
- Theme 2: Teacher Effectiveness
- Theme 3: The Teaching and Learning Process

Each theme consists of a list of related factors and has a structured checklist format which guide the researcher throughout the observation sessions (Appendix1, 2 3).

The researcher allocates five hours per visit in each classroom, hence a total of fifteen hours per classroom with a totality of sixty hours. The researcher together with the teachers negotiates in advance the dates of the observations due to many planned school activities and other events happening in the school throughout the time of the observations.

3.5 The Interviews

As defined by Anderson and Arsenault (1998), interviews are 'specialised forms of communication between people for a specific purpose' (p. 222). However, these go beyond plain conversation since interviews are rich sources of data which provide more complete information and clarify questions and/ or misunderstandings about the topic under study.

In order to corroborate data, the researcher uses two types of interviews with the same four teachers of the observations namely; unstructured interviews and

semi-structured interviews. Unstructured interviews take place during or after the observations sessions and although are done in an informal conversational way, still are based on a clear plan. The prime idea of such interviews or conversations is 'to get people to open up and let them express themselves in their own terms and pace' (Bernard, 2000, p.211). These short, on-spot interviews enable the researcher to clarify and understand better various features and other details which are not clear during the observations.

Following the observation sessions and analysis, the researcher carries out the semi-structured interviews. This helps the researcher to support data gathered from the observations to produce richer data. During the interviews, the researcher takes the role of an active listener, however prompts and probes questions as need be (Cohen et al., 2000). In doing this, the teachers and the researcher enter into a kind of interactive relationship that contribute to deeper understanding, reliability and validity of data (Anderson & Arsenault, 1998).

3.6 The Questionnaires

Questionnaires are given to two classes; Grade 4 and Year 5. The main aim of this questionnaire is to collect information direct from the learners about the LML process and how they use it and about learning in general.

The researcher personally presents the questionnaire to the pupils in the classroom and explains the purpose and the questions as clearly and simply as possible. In addition, it is also pointed out that no names need to be written so as to safeguard the data of the pupils. This also encourages the learners to answer carefully and truthfully.

3.7 Conclusion

The researcher reports and analyses the data from the observation sessions, the interviews and the questionnaires separately. Then all the data from the three sources will be combined, reported, analysed and discussed under the aforementioned three themes.

Chapter 4

Findings and Results

Findings and Results

4.1 Introduction

This chapter aims to present and describe the data and information obtained from the observation sessions and the questionnaires. It gives a running report of the findings gathered from the in-class observations as well as an illustration of the questionnaires' results.

The chapter starts with presenting narratives of what happens in real primary classroom situations engaged in the Let Me Learn process. It describes how teachers who attended the Let Me Learn Professional Learning Programme use (or otherwise) the theory, knowledge, strategies and methods promoted by the Let Me Learn process with the intention to reach all learners. This is then followed by the results of the questionnaires given to students in Grade 4 and Year 5.

4.2 The observation sessions

Four classrooms; Grade 2, Grade 3, Grade 4 and Year 5 were observed. The sessions were held between March 2008 and June 2008. All the four teachers of the classrooms observed are qualified with a B.Ed degree from the University of Malta and have received training in the LML Professional Learning Programme. Each presented report, highlights the main points, factors and incidents that constitute intentional teaching and learning such as; the classroom environment, the teacher's own attitude and teaching style, teachers' and students' meta-awareness of self and others, meta-cognition in teaching and

learning, reflective practice and the LML process itself. All the names included in the following reports are fictitious.

4.2.1 Teacher 1: Alison

Alison's learning patterns' scores: **S (27) P (32) T (9) C (28)**

Alison approaches learning with sequence and precision. This implies that she gives a lot of instructions, offer details, needs and has everything organised and planned. Her pupils present themselves as Precise processors at a Use First level, followed by Sequence with nobody avoiding either of these patterns. The teacher also uses the Confluent pattern as Use-First. The class mean score of the Technical Reasoning pattern is higher than Alison's own score. Therefore, it is a challenge for her to understand the pupils who use their Technical pattern more than her but she says that the LML process helped her in this. In fact, now that she is aware of the Technical learners she includes hands-on and practical work more often in her lessons. In addition, she tries to minimise herself from giving never-ending instructions as she breaks such instructions into smaller steps.

Physically the classroom is big and spacious which comfortably accommodate twenty-six pupils. There are clear pathways and passages for both the teacher and pupils to move easily. The children are seated in vertical rows; two rows facing each other on the left and right side of the classroom, with the teacher's desk situated on the front right opposite the classroom door. The teacher opted for this type of arrangement as she could easily monitor everyone and she believes that such a setting promotes learner collaboration.

The teacher's Precision and Sequence are reflected both in her classroom environment and her teaching style. Her classroom is neatly ordered and everything is in place. Eye-catching wall displays such as charts, flashcards, art work and children's work create a colourful and child-friendly environment.

They are organised according to topic. A corner which displays the theme of the month is apparent on a prominent wall toward the front of the class wherein the teacher sticks interesting information or work done by the children related to the month's theme. Alison teaches through a thematic approach as she believes that in this way children learn and grasp the concepts more. A classroom rules chart encouraging positive behaviour is also displayed near the whiteboard.

In addition to these, Alison displays motivational quotes such as; 'We turn mistakes into learning opportunities'. This promotes a positive and safe environment wherein the children are not afraid to take risks. Alison works a lot on this so as to encourage positive learners. She does this by creating successful learning experiences and tries to enhance the children's self-esteem as much as possible;

"Brava talli pruvajt Naomi... darboħra nħaddmu lil Fina naqra aktar... għidilha li it's OK to make mistakes..."

"Good for trying Naomi... next time we need to stretch Fina more.... Tell her that it's OK to make mistakes..."

(May, 2008)

The LML characters are also present on a table towards the front of the class. The teacher uses the four LML characters to;

- help the children understand what is going on, what is expected from them and to help them reflect on what patterns and strategies they need to use:

T: *"Liema taħsbu li ser nużaw l-aktar?"*

Pupil1: *"Lil Fina"*

T: *"Brava....għalfejn?"*

Pupil1: *"Għax Fina tħobb tikteb ħafna..."*

T: *"Bravi... u anke lil Żringi ser nużaw... biex ittina l-ideat ħalli nkunu nistgħu nimlew il-vojt."*

T: "Which character are we going to use here?"

Pupil 1: "Fina"

T: "Good... why Fina?"

Pupil1: "Because Fina likes to write a lot."

T: "Well done... we also need to use Żringi... so that she gives us ideas to fill in the blanks."

(May, 2008)

- to correct children's mistakes and help them to correct and better their work;

T: *"Ha ngiblek lil Żringi ħa tgħinek taħseb aħjar... Issa perfect silence ħalli kulhadd jahseb. Erġa' għidli s-sentenza Thea.... She _____ in the chapel..."*

Thea: *"...prayed"*

Pupil: *"Wow Miss, Żringi works miracles!"*

Teacher: *"Bravissima Thea.... and thanks to Żringi too!"*

"Let me bring you Żringi to help you think... Now I want perfect silence for everyone to think. Tell me the sentence again Thea....She _____ in the chapel..."

Thea: "...prayed"

Pupil: "Wow Miss, Żringi works miracles!"

Teacher: "Well done Thea.... and thanks to Żringi too!"

(May, 2008)

In using the LML process on a day-to-day basis, the children are aware of their learning processes, of their strengths and weaknesses and how the LML characters help them, for example; "look Miss... I have Fina on my desk. She's helping me to write my sentences neatly!" (Observations, May 2008).

The LML empowers the pupils to communicate their internal thoughts and processes out loud; "I pushed Żringi a little bit more cause I usually avoid it", hence they develop into intentional learners.

With regard to feedback, the teacher uses oral feedback which is immediate and positive such as; "...well done Martina... you're writing much neater." The teacher is very positive in her approach with her pupils and she tries to create successful learning experiences throughout the children's learning processes as "*...huwa importanti li jkun hemm stejjer ta' suċċess fil-proċess tat-tagħlim* – this empowers the children as learners" (Observations, May 2008).

The teacher shares and clears objectives at the beginning of each lesson. She clearly communicates and explains the purpose behind a learning activity, a task, or a lesson. The class is involved in an E-twinning project and she wants to make sure that everyone understands why they are doing this by saying:

"Qed nagħmlu hekk l-ewwelnett biex nieħdu gost! Biex naħdmu ma' pajjiż fl-Ewropa, u biex meta tikbru tibqgħu tiftakru kif titgħallmu l-aħjar u b'hekk jgħinkom biex tistudjaw aħjar..."

"First of all we're in this project to have fun! Then to work with another European country and so that when you grow up you remember how you learn best and will be able to study and learn better..."

(May, 2008)

Alison gives a lot of importance to the process of learning rather than the actual product:

"Iddum aktar veru u bħala end product tista' tagħmel anqas imma l-kwalita' iktar importanti... Aħjar ftit u nkun ċerta li fehmu sew. Dan itihom aktar kunfidenza fihom bħala learners u għalhekk ikunu motivati aktar biex jitgħallmu."

"Giving first priority to the process of learning is much more time-consuming and you would have less of the end product but it is the quality which is the most important... I'd rather be sure that the all the children grasped the concepts well. This will give them more confidence as learners and thus they will be more motivated to learn."

(May, 2008)

Although the teacher encourages children to be confident in what they are doing and believe in themselves, she still allows time for them to ask questions as she

understands their needs to ask and feel safe as: “*...ħafna mill-girls li huma high in Sequence u Precision kull ma’ jkollhom bżonn reassurance (...the majority of Sequential and Precise learners all they need is reassurance)*” (Observations, May 2008).

Alison is also aware of the Confluent and Technical learners. She includes practical work such as experiments in Science, hands-on activities and video-clips showing real life situations. Alison also tries to shorten her explanations and breaks down the lessons into spots where she balances between teacher-talk and pupils working on a task. The teacher values and includes the Technical learners as much as possible: “*...għalkemm dawn il-girls ma tantx iħobbu jiktbu xorta ser jgħinu l-grupp permezz ta’ l-esperjenzi personali tagħhom (Although the girls who use the Technical pattern do not like to write, they are still going to contribute and help the group by sharing their own personal experiences)*” (Observations, May 2008).

In between lessons the teacher and the pupils sing a song or do some stretching movements which serve as a short break. The teacher does this as she understands that the Technical learners in particular, need frequent breaks where they get up and move.

As the pupils as a group are Sequential and Precise processors, Alison provides them with sufficient and clear instructions. She says them slowly in order to let children absorb and understand them as; “If they don’t get step 1, they definitely will not pick up on the other steps” (Observations May, 2008). However, she does not do this at the deterrence of the Technical and Confluent learners as she let such learners start working on a task and attend to them later as need be.

Both the teacher and pupils are engaged in a process of discovery of self and others. The teacher takes every opportunity to share her thoughts and understanding with the children to instil in them the same type of behaviour:

“Issa għalhekk nifhem għala Krista tibda tippanikja meta jien nibda ngħaġġel xi ftit! Krista imma issa mhux ser tibqa’ tippanikja ħafna għax issa lil Fina ser tgħidilha biex toqgħod ftit kwieta... u għalhekk ser tgħinha tul ħajjitha kollha.”

“Now I can understand why Krista starts panicking when I go a bit fast! But now Krista is not going to panic so much anymore cause she’s going to tell Fina to quite down a bit... and this will help her all through her life.”

(May, 2008)

Of interest is that the children start to show the same type of awareness as shown in the following case: *“aħjar Lisa tgħid lil Fina biex tieqaf taqbeż ġewwa fiha u tgħid lil Żringi biex tgħinha...”* (...it would be better if Lisa tell Fina to stop jumping inside her and instead tell Żringi to help her...) (Observation, May 2008).

The teacher does not always present tasks which are congruent to the students’ preferred learning patterns as she believes that they need to learn how to use all patterns to some degree:

T: “...għal dan l-exercise, Jessica, għandek bżonn tkun attenta u timxi b’subgħajk bilmod... għandek bżonn tistreċċja lil Fina u lil Żringi għidilha toqgħod ftit kwieta għalissa!”

T: “...Jessica, for this exercise you need to pay attention and use your fingers to guide you... you need to stretch Fina and tell Żringi to be quiet for a while!”

(May, 2008)

Alison uses the LML process in all her teaching as she believes that; “the Let Me Learn is a tool that if used well and with intention will yield great results and success!” (Observations, May 2008).

4.2.2 *Teacher 2: Lisa*

Lisa's learning patterns' scores: **S (21) P (21) T (15) C (29)**

The teacher use the Confluent pattern as 'Use-First' and use Precise and Sequential patterns on 'As Needed' basis. Lisa has to forge the latter patterns to be able to meet and accommodate the pupils in her classroom, whereas tether her dominant Confluent pattern. In general, as a group, the learners present themselves as Precise and Sequential learners.

The classroom is physically a medium-sized class which is rather small for twenty-eight pupils however a stimulating learning atmosphere is immediately detected.

The classroom layout promotes and encourages collaboration as the "...children are seated in groups hence more opportunities for learner collaboration. The children consulted and guided each other within the home groups" (Observation, March 2008).

The ambience is warm, very welcoming and calm. The pupils' work such as; art and craft work, written pieces of work and charts are displayed on the walls which make the classroom their own. Displays also include charts and flashcards made or ready-bought. The charts display key information related to the subjects or theme of the month. As the pupils are highly Precise and Sequential, they need to be surrounded by ample information. A classroom rules chart is also present on a prominent wall of the class. In this classroom interest centres and/or learning centres are not present due to lack of space, however a library corner is situated towards the back left corner of the class. Adjacently, there is a 'Quiet Corner' where children can go there to work alone. The teacher created this particularly for the pupils who the Technical Pattern. A

Learning Support Assistant is present in class who helps a child with mild Autism.

The LML characters are highly visible and present in the classroom. The teacher and students use and interact with them as though they are living things. The teacher dedicates a section in her classroom where she puts all the information related to the LML process such as pictures of the four characters and their characteristics, the Word Wall and work which was done using different learning patterns such as; stories, drawings and models.

As the children present themselves as Precise and Sequential learners, the teacher understands that they need structure so she keeps certain routines to keep them focused for example; she always writes the homework at the left side of the whiteboard and all children go through a checklist at the end of the day to make sure they have everything in their schoolbags and in place. This promotes responsible learners and provides a sense of order and organisation as the children thrive on this.

Lisa tries to present real life topics and practical situations during the teaching and learning process so as to reach and involve the Technical learners. She makes them feel involved and included as much as possible: "...the girls who learn like Faru, are the ones who can really help us here" and "Amy is going to help you a lot in this... she is a Faru. Let's all see how good you are!" (Observations, March 2008). Lisa uses these children as a useful teaching resource in class and explains this to the pupils:

“Peress li l-grupp ta’ Nicole jixbhu kollha lil Ġeru kellhom bżonn lil xi ħadd li jixbah lil Żringi jew lil Faru bħal Adriana... Żringi u Faru ftit għandna bħalhom fil-klassi, imma kulhadd għandu ftit ġewwa fih – allura l-ftit li għandna rridu nistreċċjawhom naqra mhux ħazin speċjalment meta jkollna l-istampi...”

“Since all the girls in Nicole’s group resemble Ġeru, they need someone who learn like Żringi or Faru like Adriana... We have very few children in class who learn like Żringi and Faru but everyone has a little bit of them in you – so we have to stretch them quite a bit especially when working with pictures...”

(March, 2008)

The teacher is very positive in her attitude and praises children to increase their motivation and will to learn: *“M’hawnx għalik! Qed tara kif irnexxielek! (Well done! I told you that you can do it!)”* (Observations, March 2008). The teacher provides supports and challenges according to the abilities of the children. Two girls are challenged to work together on a “difficult task and [could] get help from Ġeru and Fina”. Apart from challenging the students, the teacher also gives support to those who need it the most as for example, she gave additional work in Maltese to an English speaking girl to further develop and improve her skills and competencies in the Maltese language.

Lisa differentiates the majority of the work she presents, for example she starts a comprehension worksheet by easy exercises consisting of underlining the correct word to more difficult ones including answering open-ended questions. She also differentiates in terms of learning patterns as she presents different activities and tasks such as; role-plays, Power-point shows, stories and other writing activities.

Although the teacher is not a strong Sequential processor, she still provides sufficient and clear instructions for the benefit of the Sequential pupils; “...first you have to read the passage about rivers. Second, work on the diagram – you have to cut the words and then stick them on the correct part of the diagram so the end result will be a labelled diagram” (Observations, March 2008).

The teacher also refers to and uses the LML characters to promote meta-awareness in learning as this will help the children to understand what is going on throughout their own learning process;

“In this activity we will be using all the characters. We need Ġeru to help us put things in order, Fina helps us when we have a lot of information in the passage and Faru and Żringi are going to help us when we use the scissors, when we colour and then to stick the words.”

(Observations, March, 2008)

Lisa relates learning with the pupil’s real life experiences by asking questions such as; “*Tafu x’inhu kanarin? Hawn xi ħadd għandu d-dar? Fejn jgħix u x’tip ta’ ikel tatuh?* (What is a canary? Is there someone who has one at home? Where does it live and what kind of food do you give it?)” (Observations, March 2008). In this way, she is also targeting the Technical learners as they like to use their own personal and practical experiences in learning new things.

The teacher likes to present a sample of the work expected as she knows that this is beneficial for the Sequential learners. However, she also emphasises originality and states that she does not accept work which is a photocopy of the sample given;

“You are not to copy my story... I want to hear and read your own stories so you are going to think and use your imagination. Let me put Żringi in the middle to help everyone get original ideas... all of you need to stretch her a bit... and when you have an idea write it immediately or else it will get away again...”

(Observations, March 2008)

At the beginning of each lesson, the teacher communicates the aims of the lesson and then assesses whether these have been reached or not by posing and asking different types of questions throughout the lesson and/or in the

conclusion such as; “What is a flat shape?; What is a curved shape?; Can you find me an example of a curved object?” (Observations, April 2008).

Lisa encourages children to use their learning patterns prior beginning working on a task and she does this by referring to the LML characters by saying; “...remember to use your patterns.... Faru is going to help you to solve problems, Ġeru to count properly and Fina to remember information and use it well” (Observations, March 2008).

In addition, she continuously makes use of the LML characters to help children stretch their patterns;

*“Fittxu lil Ġeru ġo fikom u streċċjawh
...kulhadd għandu ftit minn Ġeru.”*

“You need to find Ġeru within yourselves and stretch him.... everyone has a Ġeru.”

(March, 2008)

Lisa uses the LML characters to make the students think and analyse the particular task at hand and what learning patterns they need to use;

Lisa: “Who’s gonna help us remember the information and fill in the blanks with the right words?”

Children: “Fina”

Lisa: “So the girls who don’t learn like Fina, like me, they need to stretch her a bit to be able to do this exercise.... and the girls who are ‘strong’ in Fina can help a bit here”

Girl: “Ġeru is going to help us as well... to put the words in order... so that the words will make sense when you read the passage.”

(March, 2008)

The teacher values collaborative learning as well as individual work as she understands the importance of both approaches:

“Only when you’re ready you work in groups as first I want everyone to work on her own. If you need help you can ask a friend who works a lot like Fina. First try and write the word in pencil, then group up and help each other and discuss to make sure everyone’s done it properly.”

(April, 2008)

Lisa communicates her expectations with her pupils as she believes that “it will help them stay focused”. She sets high but realistic expectations as she believes that all her pupils can succeed; “...this exercise is not easy, but I know you can do it... so I want you all to try your very best” (March, 2008).

4.2.3 Teacher 3: Maria

Maria’s learning patterns scores: **S (31) P (26) T (13) C (16)**

Like the majority of the teachers, Maria makes use of the Precise and Sequential patterns on a Use-First basis. She avoids the Technical Reasoning and Confluent patterns. Maria teaches the last stream of Year 5. As a class they present a number of challenges to the teacher particularly as the way she constructs learning is incongruent with how the pupils learn. She describes her pupils as ‘*batuti*’ (slow) and ‘*mhux bright*’ (they are not bright). This immediately reveals the expectations she holds for these students. A Learning Support Assistant assists a child having mild intellectual disability. The students, fifteen in all, present diverse strong learning patterns, with the Technical pattern being the most dominant one, following is the Confluent pattern and the Sequential and Precise patterns respectively.

Upon entering the classroom, one could note that it lacked resources. A minimum number of four charts including the ‘Word Wall’ and hand-written type of flashcards were displayed. There is no class rules chart and the

children's work is not evident at all apart from coloured-in paper flowers stuck around the whiteboard. The children are seated in a horse-shoe arrangement. The teacher's desk is situated at the front and right-hand side of the class and close to the whiteboard. The classroom has a TV monitor and three computers which the students never used at the time of observations. A library corner displaying an array of old books is situated at the back right-hand corner of the class.

It is on rare occasions that the teacher shares and communicates the lessons' objectives. She starts the lesson by often asking close-ended type and unproductive questions such as: *"Tafu x'inhil fazola?; Ġieli rajtu lil mama' jew lil xi ħadd isajjarha?"* ("Do you know what beans are?; Have you ever saw your mother or someone else cook it?") (Observation, March 2008).

The only lively resources which are used are the LML characters. The teacher refers to them to ask children about the learning patterns they need to use for a particular task or activity:

T: "Biex naħdmu s-somom, bħal min irridu nkunu?"

Pupil1: "Bħal Ġeru"

Pupil2: "Għax dak iħobb jagħmel l-affarijiet puliti u jħobb jimxi wara xulxin"

Pupil3: "U anke bħal Fina!"

T: "Brava, għaliex?"

Pupil3: "Għax irridu naqħmlu l-answers eżatt"

T: "Which character do we need to use when working out the sums?"

Pupil1: "Like Ġeru"

Pupil2: "Because he likes to do everything neatly and works step-by-step"

Pupil3: "I think we also need Fina!"

T: "Good, why?"

Pupil3: "Because we need to write exact and correct answers"

(March, 2008)

The teacher does not provide further work for those students who finish earlier than their classmates and so not everyone is kept busy. Maria does not fully challenge the pupils and thus she holds low-expectations for them. She thinks

that they are not capable of learning and needs to repeat the same things over and over again:

T: "Irridkom terġgħu taqraw l-istorja ħalli tifmuha tajjeb żgur."

T: "I want you to read the story again so that you will understand it better"

Boy: "Diġa qrajta tliet darbiet!"

Boy: "I already read it three times!"

Owing to the incongruence between the teacher's and the children's learning patterns, the teacher mainly targets the Precise and Sequential patterns and quite exclude the Technical and Confluent ones. A boy who scores high in Confluence strives for originality: "*Jien nista' nagħmel hekk biex inkun differenti?* (Can I do it in a different way so as to be original?)". The teacher said that:

"...ġieli nħallih imma skond l-activity xi tkun... ġieli jkun hemm bżonn li kulhadd jagħmel l-istess haġa imma Liam mhux dejjem jifimha."

"...sometimes I do let him but it depends on the activity... there are instances where all children need to do the same thing, but Liam does not always understand this."

(April, 2008)

In saying this, Maria does not always allow time for creativity and originality. She asks the pupils to copy exactly the same sentences she wrote on the whiteboard.

The teacher's teaching approach is quite traditional as she gives out a lot of information without letting the pupils speak and share their experiences or thoughts. The Technical learners get bored, fidgety and frustrated. However, through mentoring and awareness in the LML, the teacher starts to understand the Technical and Confluent learners:

“Jekk tifel inkun naf li huwa Tekniku ħafna u narah qed jitlef l-attenzjoni waqt li nkun qed nispejga, ma noqgħodx nitfa’ ħafna attenzjoni fuqu għax naf li mhux għax irid jew apposta imma għax il-learning pattern tiegħu jirrekjedi hekk. Pero’ ma nħallix in-nuqqas ta’ attenzjoni tkompli għaddejja u niġbidlu l-attenzjoni u nipprova nqassar l-ispejgazzjoni tiegħi.”

“If there’s a boy who is highly Technical and I see that he’s losing attention while I’m explaining, I would not fuss over as I know the reason why. However, I do try to gain back his attention and I try to be succinct in my explanation.”

(April, 2008)

Through mentoring, Maria is encouraged and guided to attend to the needs of these students. In the last observation visit, there was a shift in the teacher’s teaching approach as she is acknowledging all the learners in her classroom. During a Mathematics lesson, she says: *“Ha npenġuha naqra s-somma.... għax meta tpingi tifhem (Let’s draw the sum.... because the drawings help you understand more)”*. She presents the sums through both auditory and visual means, for the benefit of the Technical and Confluent learners.

Maria together with the help of a LML mentor delivers a Maltese story-writing lesson. They aim to target all the four learning patterns and start the lesson by giving an overview of what they will be doing. Then the teacher continues by highlighting the importance of writing an original story and refers to Żringi – and “the children who are low in it, will have to stretch her a bit”. She wants pupils to stretch their Confluence and uses the students ‘who learn like Żringi’ to help other pupils brainstorm original ideas. Maria caters for the Technical and Confluent learners as she gives them the option to draw their story before attempting to write it:

“Min irid forsi jpingi xi ħaġa qabel ma jibda jikteb jista’ wkoll... biex ikollu aktar ideat ċari... imma teħlux fit-tpiġija biss...aħsbu fil-kitba wkoll. Qed ngħidilkom hekk għax billi tpingu ser timxu”.

“Before you start writing, you can draw something... so that you have clearer ideas... but I don’t want you to spend a lot of time on drawing... think about the writing”.

(April, 2008)

Three children high in Confluence, participate more during the brainstorming and discussion of ideas. This implies that when learning meets the students' needs, they are more motivated and willing to learn. Maria also encourages the pupils to use their Power Card when they are stuck as it gives them strategies to deal with the task at hand. She does not present the writing as a whole task as it frustrates most of the Technical learners. Instead, she offers step-by-step and short guidelines to guide the children in writing. She offers tips to guide her pupils in writing the story:

"Biex l-ideat ma jaħarbulniex – għax l-ideat bħal Żringi... Żringi tibda taqbeż u hekk jagħmlu l-ideat. Mela l-ewwel ser niktbu points u wara nżidu l-kliem biex nagħmlu l-ideat isbaħ u nkabbruhom."

"We need to write down our ideas into points so that we won't forget them or escape... as ideas are like Żringi... she starts to jump and so do our ideas if we don't write them down. Then, we add more words to our ideas to make them sound nicer."

(April, 2008)

A boy high in Technical Reasoning wants to work alone and he said to a girl sitting next to him "...issa ħallini kwiet ħa naħdem għax nerga' ninsa! (...now leave me alone... I want to work or else I'll forget again)". He is taking long on the drawings and the teacher immediately asks him to start writing. He answers that he "...nħobb ngħidhom l-ideat mhux niktibhom! (...I like to tell and talk about my ideas and not put them in writing!)" (Observation, April 2008) The teacher helped the child by offering strategies which he could use:

"Issa billi pinġejt, ejja naraw kif ser tgħinek it-tpinġija biex tikteb. Ma pinġejtiex għalxejn zġur.... aħseb ftit xi trid tgħid fuq kull stampa... qisek qed tiddeskrivi l-istampi u nizzilhom bħala punti l-ewwel".

"Let's see how your drawings can help you to write... u certainly didn't do it for nothing... think about what do you want to say about each picture... it's like you're describing them... and then jot down your thoughts in points first."

(April, 2008)

The LML characters empower the children as learners and give them a sense of fulfilment and success. A boy who uses the Technical pattern as 'Use-First' claims that he never before wrote such a long story:

Boy: "Ma nafx kif ktibt daqshekk, Ms!"

Me: "Is-soltu tikteb anqas?"

Boy: "Iva....s-soltu nikteb hafna inqas. Ma tantx inħobb nikteb u lanqas l-iskola ma nħobb imma naħseb Ġeru u Fina għenuni hafna illum."

Boy: "I'm surprised Ms! I never wrote so much!"

Me: "Do you usually write less?"

Boy: "Yes.... much less. I don't like to write and even school, I don't really like it but I think Ġeru and Fina helped me a lot today."

(April, 2008)

During a science lesson, the boys who are high in the Technical pattern participate very actively. They orally answer to almost all the questions and share their opinions and thoughts. This is the total opposite of what happens in other lessons such as English or Maltese. This shows that when learning is relevant to children, they are more empowered as learners and facilitate the path to success.

4.2.4 Teacher 4: Mandy

Mandy's scores: **S (30)** **P (33)** **T (20)** **C (22)**

The majority of the students present themselves as Precise Processors at a Use first level followed by Sequence with nobody avoiding either of these patterns. Following is the Confluent pattern, with eight students using it as 'Use First. The Technical pattern is the one used the less with 6 pupils using it first and 10 pupils avoiding it completely. Mandy's patterns are quite congruent with the learners' but she still needs to forge her Technical pattern to make learning relevant for the Technical processors.

The classroom environment is pleasant and colourful. The walls are painted bright yellow and the blue curtains fit in nicely. The students are seated in groups of four or five each and the teacher's desk is placed at the front left-hand side of the classroom.

Charts, pictures and children's work including; art work, crafts, and project work are displayed on the classroom walls and is celebrated and valued. The reading corner situated towards the back of the class, is organised and inviting. It is decorated with cushions, mats and low chairs. The psychological environment is a very calming one which yet is so much conducive to learning.

The teacher often starts the day with 'Journal Writing'. She offers different prompts such as; pieces of music, video clip, pictures, soft-toys or lets the children invent the prompt/ idea themselves. As this is free-writing with no structure at all, the Precise and Sequential learners find it more challenging but the teacher believes that these children need to learn how to move away from a tied and rigid structure. Before starting, she tells them to relax while listening to soothing music. She helps them to get focused and ready for a day full of learning.

The teacher starts the lessons by sharing the lesson objective/s and recaps the main points done in previous lessons. She also communicates the purpose behind a topic with her learners as this makes learning more relevant.

As the other teachers, Mandy uses the LML characters to help children identify the learning patterns they need to use for particular tasks;

"Faru is going to help us solve the story sums... and solve the puzzles too. Geru is going to help us to organise and put the numbers in order"

(May, 2008)

She also uses them to help the children stretch or tether a learning pattern; "...the girls who learn like Fina needs to quieten her a bit and stretch Žringi instead!" (May, 2008).

Mandy uses different strategies to accommodate all the learners in her class. She provides and writes an example on the whiteboard to serve as a sample for those who need it – especially the Sequential learners. During lessons and even on handouts, the teacher starts from easy examples and then very subtle she moves on to harder and more challenging ones. In this way, she includes every student.

The teacher offers a plan of the day as she understands that this is helpful for the Sequential learners: “Now we’re going to write the diary and then we say the prayer so that we can eat” (Observation, June 2008).

Between lessons, the teacher allows few minutes for children to get up and do some stretching exercises. These provide smooth transitions from one lesson to another and also are very beneficial for the Technical learners as they require frequent breaks. Mandy also strives to reach the Confluent learners and she does this by using role-plays after reading a story or a comprehension text.

Like in Alison’s classroom, before packing up the children go over a checklist to check that they have everything. This provides some type of structure and organisation thus it is helpful for the Sequential and Precise learners and makes the Technical and Confluent learners more responsible and organised, which are two qualities needed to work in an effective and efficient way.

Mandy is also aware of the different learning styles. She presents sums in both the traditional numerical form but also in a visual way through illustrations; “...the book draws it for you also... and you have squares so you can see the sum and numbers visually” (Observation, May 2008).

The teacher encourages children to think and reflect on how they learn best. Consequently, they start to become more aware of who they are as learners;

“Jien bħal Ġeru nħobb nitgħallem...step-by-step. Nsibha naqra diffiċli meta nuża’ lil Żringi. Inħobb nikteb l-istejjer u naqra ħafna... gieli naqra żewġ kotba f’gurnata... anke meta nlesti fil-klassi noqghod naqra. Ma nħobbx inpingi imbagħad jew nagħmel affarijiet b’idejja.... meta npingi għax ma jkollix xi ħaġa oħra x’nagħmel... u nħobb inpingi bil-lapes biss mhux bil-kuluri.”

“I learn like Ġeru... step-by-step. I find it hard when we need to use Żringi. I like to write stories as I love writing and reading a lot... sometimes I read two books in a day... even when I finish from my class-work I start reading on my own. I don’t like to draw but... or doing things with my hands... I only draw when I don’t have anything else to do... and I draw only in pencil not with colours”.

(June, 2008)

Mandy uses a multi-sensory approach in her teaching as “it’s another way of dealing with inclusion” (Observations, June 2008). The Technical learners find such a learning experience practical and meaningful. Apart from this, Mandy uses practical and hands-on work such as; cooking sessions, tangible resources, puppets, and other hands-on activities. She also includes problem-solving tasks such as sorting and classifying objects to mainly target the Technical learners. The teacher gives a lot of instructions to better guide the Sequential pupils but not in the deterrence of the Technical learners. First she says them orally and then writes them one after the other on the whiteboard so that children can refer to them later on if stuck. Her oral instructions are succinct so as not to frustrate the Technical and Confluent learners.

Mandy varies her teaching strategies as much as possible so that all learners can find learning meaningful and relevant. She includes tasks which require the skill of listening as:

“Il-maġġoranza nagħmlu lezzjonijiet immirati lejn il-ħiliet tal-qari u l-kitba u ftit li xejn lejn il-ħiliet tas-smiġħ... u din hija ħila mill-aktar importanti”.

“In the majority of lessons we plan we target reading and writing skills and very little to almost never auditory and listening skills... which is a very important skill”.

(June, 2008)

As almost all of Mandy's pupils are English speaking and thus more fluent in English, she uses a lot of gestures and different tone of voice to aid understanding;

"It-tfal huma aktar fluwenti fl-Ingliż u l-maġġoranza jitekllmu bl-Ingliż id-dar ukoll... il-mossi jgħinu lit-tfal jifhmu aħjar.

"The children are more fluent in English than in Maltese and almost all of them also use English as their first language at home....the gestures I use help them to understand better".

(May, 2008)

Mandy tries to include all the learners, including the Technical and Confluent ones. So much depends on the teacher's personal attitude and will to make learning meaningful and applicable to each and every learner.

4.3 Questionnaires

The questionnaires are distributed to 42 pupils who are in the Junior Years classes that is, Year 5 (state school) and Grade 4 (church school). Pupils are asked a total of 15 questions each with a set of possible responses to choose from. Learners' names and personal details are not collected to ensure confidentiality but the pupils are asked to write down their LCI scores at the end of the questionnaire.

4.3.1 Characteristics of the respondents

The pupils' age is between 8 and 9 years. The majority of the learners use the Precision pattern as 'Use First' and following is the Sequential pattern. Two of the respondents use Confluence as their main pattern while only one use Technical Reasoning. The majority of the respondents score low in Technical Reasoning and Confluence. Figure 4 gives a breakdown of the number of boys and girls that made up the respondent group.

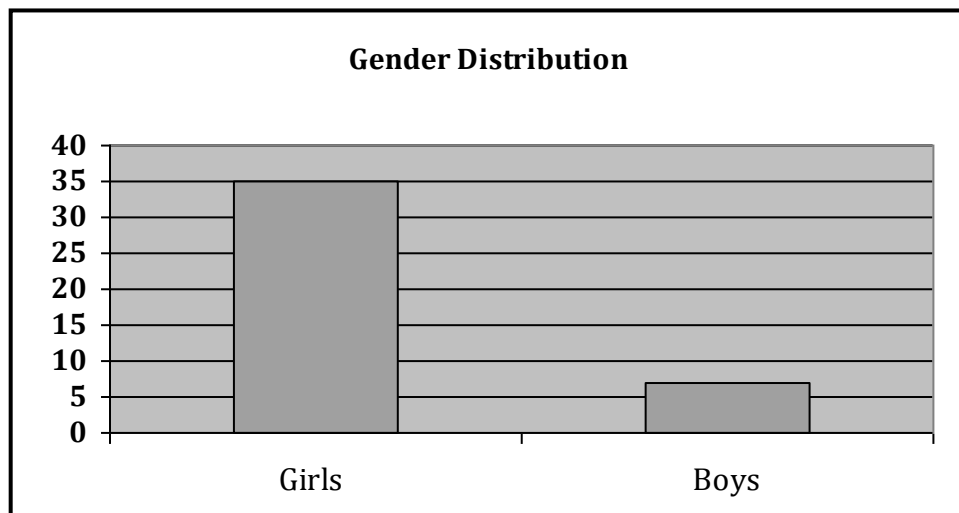


Figure 4: Gender Distribution

Figure 4 findings:

- There are 42 respondents; 35 of which girls and 7 boys. This is due to the fact that one class is in a girls' Church school.

Learning new things

Question 1 is an open question asking pupils if they like to learn new things. The children have to tick either Yes, No or Not Always. The results to this question are illustrated in Figure 5.

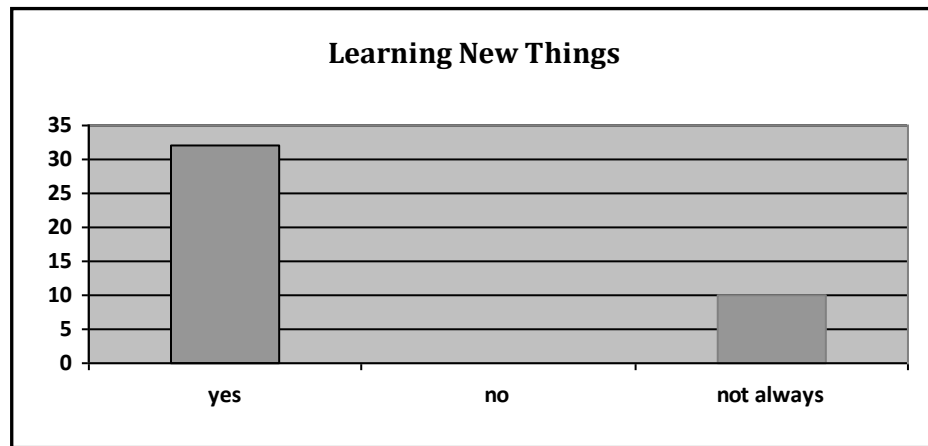


Figure 5: Learning New Things

Figure 5 findings:

- More than half of the pupils state that they like to learn new things.
- On the other hand none of the children say that they do not like to learn new things.
- Ten children state that they not always like to learn new things.

Learning happens Everywhere!

Question 2 asks the pupils to indicate their preference of where they learn best, the choices being; in class, at school which was divided into three options namely; in the library, in the playground and in the IT/ PC lab, at home, at sports lessons and Others. Figure 6 illustrates the learners' answers.

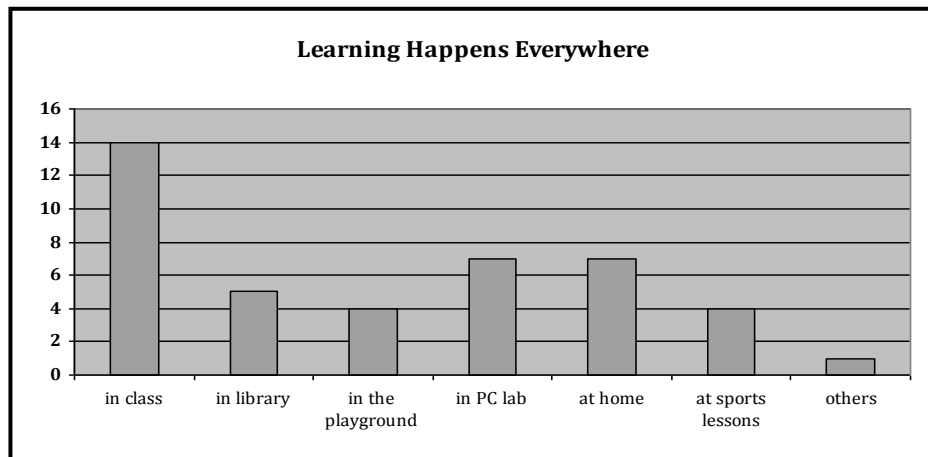


Figure 6: Learning Happens Everywhere

Figure 6 findings:

- Most of the children learn best in their classroom.
- In the computer lab and at home are the next two places where children prefer to learn.
- Four out of forty-two children chose out-of-school activities such as 'at sports lessons'.
- Only one girl ticked the 'Others' option wherein she wrote that she learns best at Museum lessons – a place where children go for their catechism classes.

Learning strategies/ methods

Question 3 asks the children how they learn best. The children choose one from six options which include; 'See and Listen', 'Draw', 'Read', 'Do Things', 'Write' and 'Study'. The results are shown in Figure 7.

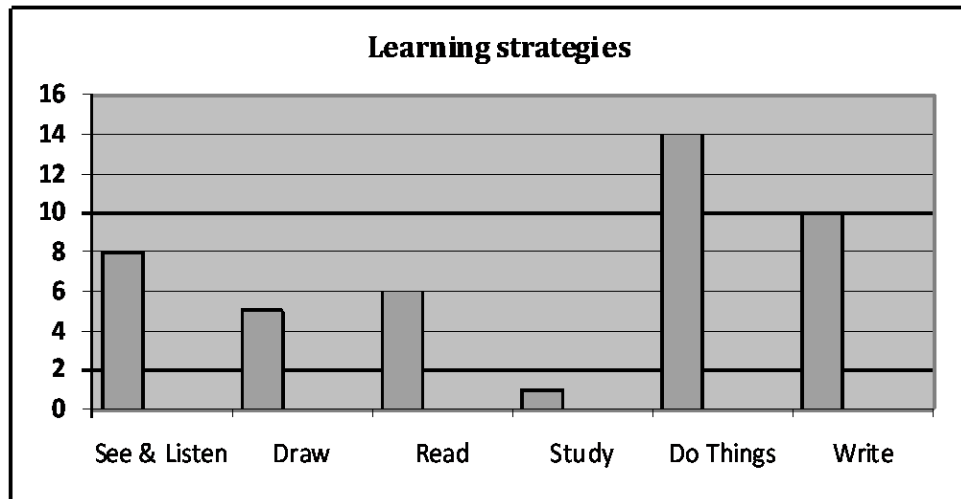


Figure 7: Learning Strategies

Figure 7 findings:

- The total result illustrated above counts up to forty-four as one child ticked three options namely; 'Draw', 'Write' and 'Do Things' as she uses Precision, Sequence and Confluence equally as Use First while Technical Reasoning as needed – hence strong-willed learner.
- Fourteen pupils prefer learning by doing.
- Ten children feel that they learn best when they write things down.
- Eight pupils make use of the auditory and visual senses to process and take in learning.
- Six out of the forty-two children learn best when they read.
- Five pupils learn best when they draw or when they have diagrams/ pictures.

- Only one pupil learns best when studying.

Giving Help

The children were asked if they would help their friend if he or she requires further assistance or guidance. Their answers are illustrated in Figure 8.

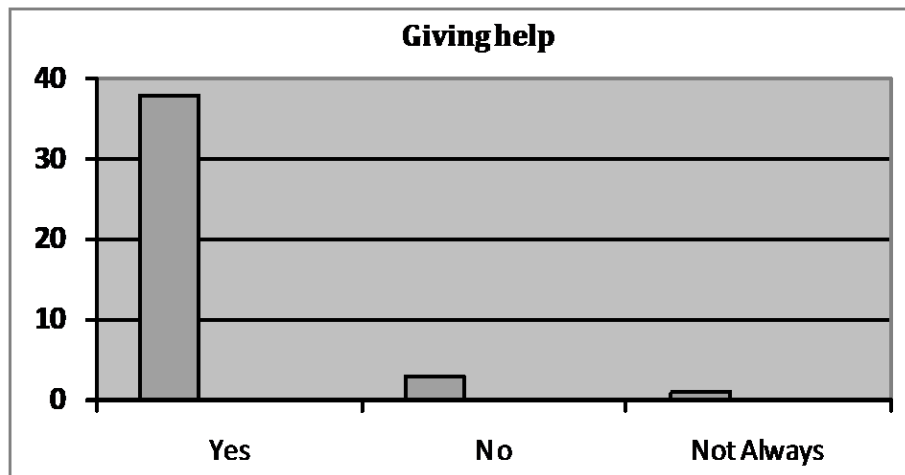


Figure 8: Giving Help

Figure 8 findings:

- The majority of the children would help their class mates if they need it.
- Three pupils would not give help.
- The other pupil would give help but it depends on the learning task, the situation and to whom.

Peer-tutoring

Question 5 asks the children in what way they would help their friends. Their answers are shown in Figure 9.

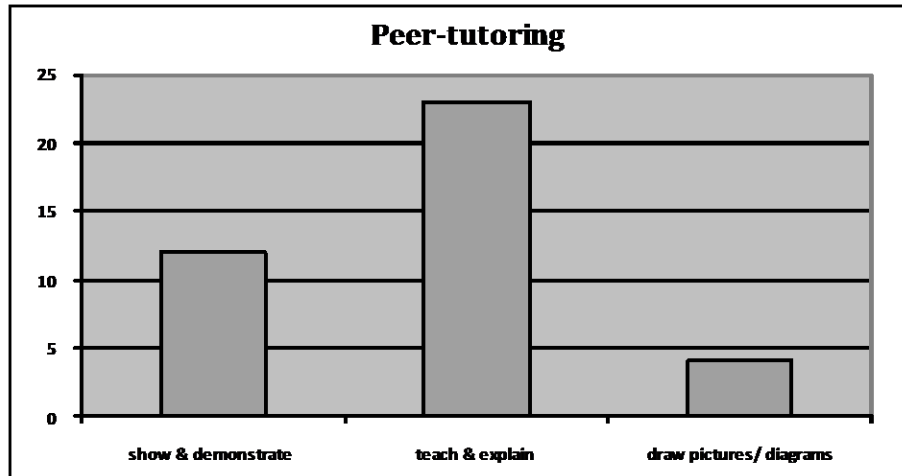


Figure 9: Peer-tutoring

Figure 9 findings:

- The results above sum up to a total of 39 respondents as three children answered 'No' in the previous question therefore this question is not applicable to them.
- The majority of the children would help their friend by teaching and explaining.
- Twelve of the children would demonstrate/show and model how to go about the difficult task/ activity.
- The other four pupils would help in a more visual way by drawing pictures and/or diagrams.

This mirror the scores and patterns of the pupils interviewed – as the majority of the pupils score high in Sequence and Precision hence by teaching and explaining.

Favourite working style

In Question 6 the pupils are asked about how they prefer to work; either alone, with a friend or in a group. The results are illustrated overleaf.

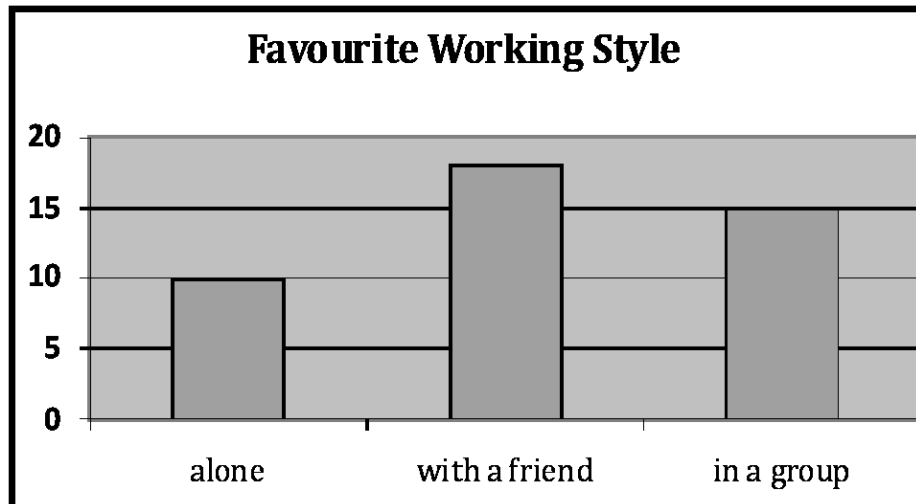


Figure 10: Favourite Working Style

Figure 10 findings:

- Eighteen out of forty-three pupils prefer to work in pairs; with one friend.
- Fifteen children favour working in a group.
- The other ten pupils would rather work alone.

Reasons for the above choices

Question 7 is an open question as it explores the reasons why children preferred to work alone, in pairs or in a group. The pupils write their own reasons rather than tick or select set choices. The responses are written below under three main categories.

Question 7 findings:

Reasons – in a group;

- I know more what to do.

- Because it is fun.... and I have fun.
- I get help from others when I am stuck.
- I learn more as everyone share ideas.
- I help others.
- I learn better and more ideas from my friends.

Reasons – alone;

- No one will bother me.
- I can experiment freely.
- Some children are bossy and act like the teacher.
- I feel left out when working in a group.
- I don't like waiting for others to understand.
- I like to do things the way I want to.
- I can use my own ideas.

Reasons – with a friend;

- I learn more.
- I have more ideas and information.
- I can share.
- Some children in a group keep everything to themselves – do not share.
- I feel happy and safe.

The four LML characters – Ğeru, Fina, Faru and Żringi!

Question 8 is also an open question asking pupils to tell who are Ğeru, Fina, Faru and Żringi.

The children write their own answers as no options are given. All of the pupils' responses are more or less the same despite the fact that they wrote their own answer. The answers that were given are collected and listed below.

Question 8 findings:

- They are soft-toys to help us learn.
- They are our friends in class.
- They are like other teachers.

Usefulness or otherwise of the characters/ soft-toys

Question 9 asks the children whether they find Ğeru, Fina, Faru and Żringi useful. Figure 11 illustrates the beliefs of the children in this regard.

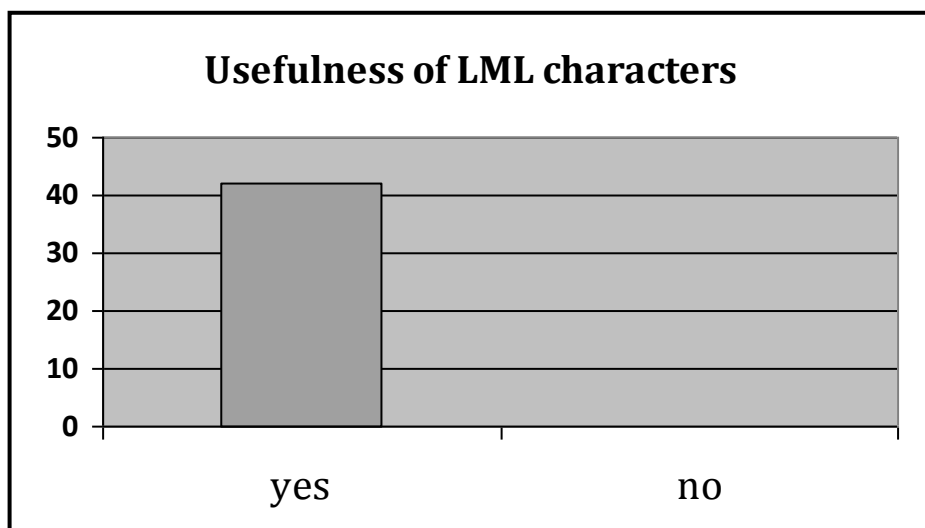


Figure 11: Usefulness of LML characters

Figure 11 findings:

- It is interesting to note that all of the forty-two pupils feel that the LML characters help and assist them in their learning process.

Reasons for using Ćeru, Fina, Faru and Źringi

Question 10, with the use of options asks the pupils to indicate why they use the above-mentioned four soft-toys/ characters. Their answers in this regard are illustrated in Figure 12.

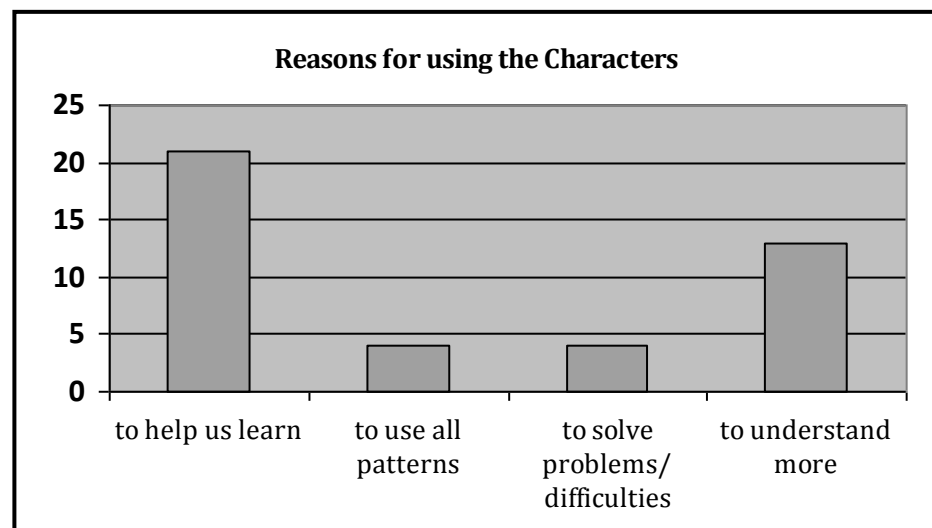


Figure 12: Reasons for using the characters

Figure 12 findings:

- Exactly half of the pupils feel that the LML characters help them to learn.
- Thirteen children find the characters useful as they help them to understand themselves, others and the learning process.
- Four pupils use Ćeru, Fina, Faru and Źringi to overcome any difficulties or problems.

- Another four pupils use the soft-toys to help them tether or forge their learning patterns, hence learning to use them all.

Character similarity

Question 11 requires respondents to indicate which character they resemble the most. The children have to choose one character, that is, the pattern with the highest score however, five pupils tick two characters each as they have the same score in both patterns. Figure 13 illustrates the children’s answers.

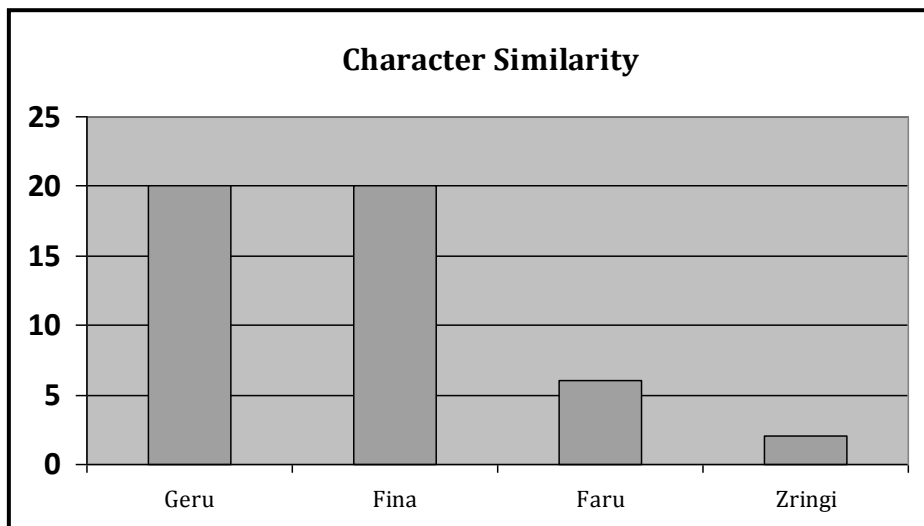


Figure 13: Character Similarity

Figure 13 findings:

- The total adds up to 47 answers instead of 42 as five children tick two characters each instead of one, meaning they have two patterns with the same score and use them both equally.
- The two most used characters (patterns) are Geru and Fina hence the Sequential and Precision patterns respectively.
- Faru; the Technical Reasoning pattern is the strongest pattern of six children.

- Only two pupils out of forty-two use Žringi (Confluent pattern) first.

Mismatch of patterns

Question 12 asks the children if they like or not using one of the characters/ pattern which they are not strong in. The results are illustrated in Figure 14.

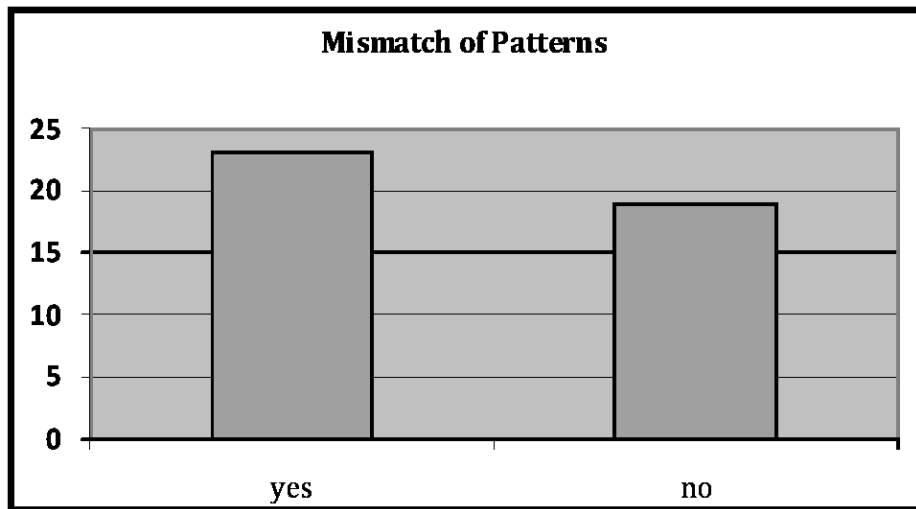


Figure 14: Mismatch of Patterns

Figure 14 findings:

- The responses are almost evenly equal. Twenty-three children like to use a soft-toy which does not learn like them.
- The other nineteen pupils do not like to use a character which does not represent their strongest patterns.

Reasons behind the pupils' answers to question 12.

Question 13 requires pupils to indicate a reason for their above choice. Four options to choose one are given (four for 'Yes' and four for 'No'). Figures 15 and 16 illustrate the results.

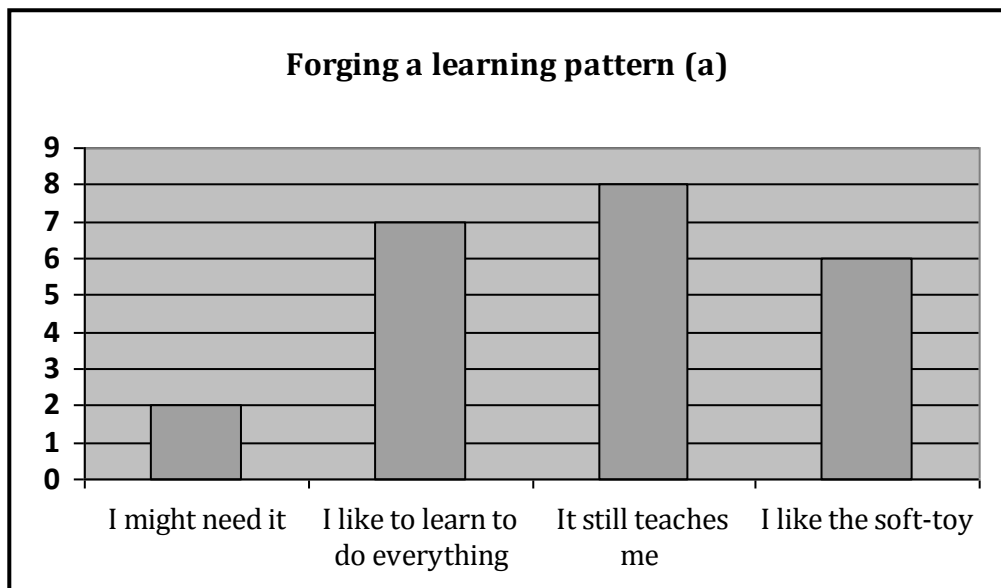


Figure 15: Forging a Learning Pattern (a)

Figure 15 findings:

- Most of the children who like to use a pattern (soft-toy/character) which is not their strongest are because they like to learn new things hence strong-willed learner.
- Closely related are the other 7 pupils who like to learn to do everything and are not afraid to take risks.
- Six out of the twenty-three children who answered that they do not mind to use a character which learns different from them is because they are appealed by its aesthetics.
- Two pupils like to use every soft-toy (every learning pattern) as they might need them when dealing with future tasks/ activities.

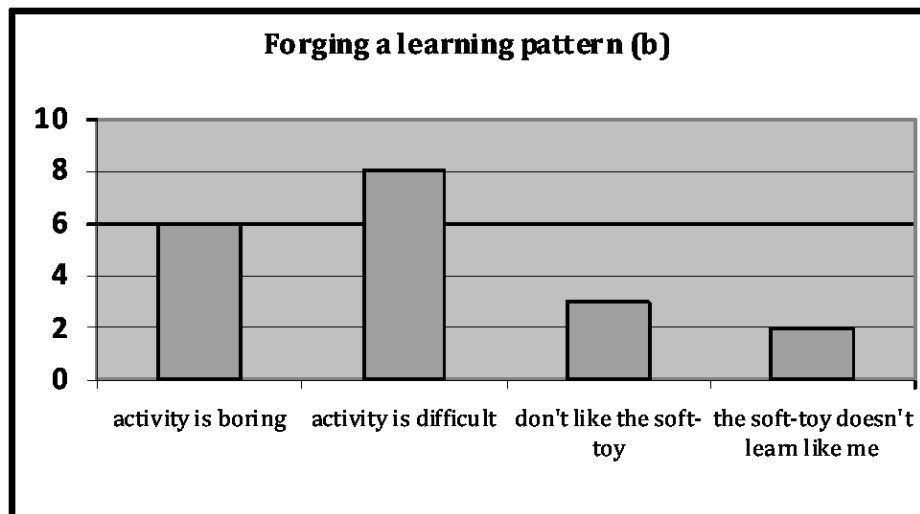


Figure 16: Forging a Learning Pattern (b)

Figure 16 findings:

In all, nineteen pupils do not like to use a soft-toy (learning pattern) which does not learn like them.

- Eight of these nineteen pupils said that it is because the task/ activity would be difficult.
- Six pupils do not like to forge a learning pattern as they find the task boring if it is not congruent to their dominant learning pattern.
- Three children base their reason on personal likeness – they do not like the soft-toy's appearance so they do not like to use it.
- Another two pupils do not like to use a soft-toy which does not learn like them.

Chapter 5

Analysis and Discussion of Results

Analysis and Discussion of Results

5.1 Introduction

This chapter discusses and analyse the findings and results obtained from the observation sessions, interviews and questionnaires carried out. The findings and results are categorized into three main themes:

Theme 1: Classroom Environment and Organization

Theme 2: Teacher Effectiveness

Theme 3: The Teaching and Learning Process

The findings and data are linked with literature review so as to increase validity. The results are attributed to two schools; a church and a state school, where the study is carried out, therefore, the findings are not necessarily a reflection of other schools in Malta.

5.2 Theme 1: The Classroom Environment and Organisation

Planning and organising the classroom environment is a very important task as this affects the quality of children's learning (Kershner, 2000 in Whitebread 2000). Although learning can happen everywhere; in school, at home, in sports lessons etc..., the classroom is the setting in which learning takes place the most. This is in line with the questionnaire findings as it resulted that children learn mostly in the classroom. This brings out the importance of setting up a classroom environment which supports the children's learning and all the

processes of learning. The classroom environment and organisation are equally vitally important in achieving intentional learning communities. In knowing their learners through the LML process, teachers create positive classroom environments which closely match and meet the needs of their learning patterns. Classrooms should foster a nurturing environment wherein everyone feels accepted and each and every learner's learning patterns and processes are developed (Johnston, 1998). As a result, all learners will feel valued and safe hence increase their will to learn. Of a total of four classrooms observed, three of them are highly conducive to learning, colourful, child-friendly, and above all, deliver an aura of positivity which help in boosting the self-esteem of all learners. It is every teacher's role to create a positive classroom climate wherein learning will thrive (Wragg, 2001). Apart from the already mentioned characteristics, these three classrooms share a warm, welcoming, calm and friendly atmosphere which is also vital for learners to feel safe and learn. On the other hand, the other classroom although physically inviting, lacks some psychological and social features as it is more simply like a place to learn in rather than a place where learners and the teacher engage in a community-type behaviour. A common thing evident in all classrooms is that the environment tends to support more of the Precise and Sequential patterns and very little the Technical and Confluent ones.

The LML process also promotes collaboration rather than competition as like Vygotsky believed, it is through participation that children learn (Pound, 2005). A collaborative environment is immediately noted in Alison's, Lisa and Mandy's classrooms, however Maria's classroom environment is more structured.

5.2.1 A meta-cognitive environment

Central to the LML process is meta-cognition that aids in producing intentional teaching and learning. Classroom environments which promote meta-cognition empower children to assume responsibility and a sense of control over their own learning "rather than they feel trapped by their lack of knowledge" (Calleja

& Montebello, 2006, p.10). The psychological, social and the physical environment of the observed four classrooms support and encourage meta-cognition. The teachers strive to develop meta-cognitive strategies and skills in all their learners. They create a meta-cognitive environment by continuously 'thinking-aloud' about the teaching-learning processes and by using the LML characters and language. In doing this, together with open-discussions on what is going on, the pupils are able to develop the vocabulary needed for thinking (meta-cognition). Meta-cognitive environments create and raise awareness of self-as-a-learner, of other learners and of the learning situation at hand (Livingstone, 2003).

5.2.2 The physical environment of the classrooms

The physical environment is also vital in setting the right mood for meta-cognition and intentionality. LML resources such as the 'Word Wall', flashcards of cue words, pictures of the four characters and their characteristics, and the 'Power Card' are evident and visible in all the four classrooms. Such resources are used, referred to and linked with and throughout the teaching-learning process. These help and guide pupils to think about their learning process and help them recognise what learning patterns are demanded by the task at hand (Osterman & Kottkamp, 2004).

5.2.3 The classroom environment and intentionality

The environment of the classrooms observed fosters and encourages intentionality. Intentionality in terms of;

Seating arrangement: the pupils are seated either in clusters/ groups, horseshoe arrangement or rows facing each other, according to abilities, personality and/or learning patterns. The teachers state that in this way the pupils will

engage in collaborative learning which will help them value and accept one another – even if it means that others learn differently. Moreover, the children themselves will serve as social models for conveying cognitive skills and problem solving skills. By observing and helping each other, they would gain greater insight of how and other peers learn and also they guide each other in forging or tethering a required learning pattern.

Resources used: during the interviews, the teachers claim that they try to vary their resources as much as possible so as to meet and reach all learners. However, in practice, the teachers use a lot of visual aids to support teaching and learning such as flashcards, pictures, charts and real-life objects but they claim that they use auditory resources such as; audio CDs and CD-Roms. Alison and Lisa also like to use PowerPoint shows, and video-clips as they know that the Technical learners will be reached better in this way. Maria still uses the traditional charts, flashcards, pictures and handouts. As such resources are quite structured; the teacher fails to address the Technical learners.

Organization of displays: displayed material such as charts, project work and children's work is all organized and grouped by and according to subjects. When resources and materials are grouped together in relation to topics/themes, appear to enhance children's learning (Whitebread, 2000). When interviewed, the teachers state that the children even the Technical and Confluent learners need to see some sort of organization in their learning environment.

5.3 Theme 2: Teacher Effectiveness

Under this theme, the researcher discusses teacher effectiveness in terms of the LML theory and how characteristics related to effective teachers help in teaching with intention.

It is not always simple to define exactly the term 'effective teachers'. When interviewed about what makes an effective teacher, the four teachers gave a number of personal and professional characteristics. The characteristics pointed out by the four teachers are abridged into the following definition;

'Good teachers understand and are aware of the needs, strengths and weaknesses of all learners as unique individuals, engage all the pupils in their own learning process and reflect and act accordingly to make learning a positive and enjoyable experience for each and every learner'.

(Interviews, June 2008)

The LML process empowers teachers to become more aware of how their pupils learn best. In turn, they would be able to create appropriate teaching strategies and learning experiences which meet their needs and foster greater life-long success. All the four teachers deem this as being of utmost importance and claim that the LML provided them with the tools to understand and to listen to the voice of each and every learner (Johnston, 2005). They can now also see how pupils, especially those who are different than themselves, approach learning. As the teachers are more aware of their learners, they plan teaching and learning accordingly and with set goals in mind hence intentional teaching.

Slavin (2000) states that 'intentionality' seems to constitute effective teachers. To teach with intention is to do things with full awareness and with a purpose in mind. All the four teachers agree that the LML training programme made them approach the teaching and learning process with more awareness and with a deeper insight of how learning occurs differently in each and every child. In view of this, the teachers say that they all strive towards a common goal that is,

to reach and meet the needs of all the learners in their classroom. They work to achieve this by planning and setting relevant learning objectives and tasks according to their pupils' needs and interests. In addition, Alison state, that since she is now aware of her learners' learning patterns, she tries to vary tasks and activities in order to tap into each learner's learning patterns. In this way all learners will find the learning process meaningful.

An effective teacher is "...one who is able to bring about intended outcomes" (Cooper, in Ellis & Worthington, 1994, p.68). Effective teachers deliberately communicate with their pupils their intended goals, objectives, and expectations. Alison, Lisa and Mandy start the lessons by sharing and communicating their objectives but is not the case in Maria's lessons. The teachers claim that the LML process enables them to link the learning objectives with the learning pattern/s thus they are able to identify which learning patterns are continuously being targeted and those that are less used.

Intentional teaching therefore begins with setting learning objectives and outcomes according to the pupils' needs and learning patterns. This will also help them to become more independent learners (Webb and Vulliamy, 1994 in Dean, 2000, p.23).

Effective teachers set high yet realistic expectations for the pupils. In doing so, they enhance self-confidence and self-esteem in the learners which then result in higher and long-lasting success. As Wood and Locke (1987) state, more challenging goals usually prompt higher achievement. Unfortunately this is not present in all the four observed classrooms - challenging goals are only set in classes of children with good to high ability levels, whereas the opposite in the low-streamed classroom. In the latter case, the 'hidden' message is quite clear. The pupils are made to believe that they need a lot of repetition as they are not able to understand things immediately. They believe that the teacher holds low expectations for them *'ghax ahna m'ahniex fil-'A* (because we are not in the 'A'

class). As a result, such children will 'develop low levels of self-efficacy and low levels of achievement motivation' (Whitebread, 2000, p.113).

The Let Me Learn process promotes and highlights the importance of reflective practice. The most effective teachers are reflective teachers. The four teachers agree on the importance and benefits of reflective practice. They all claim that they reflect on their own performance and the teaching and learning process as a whole. The teachers reflect on whether the objectives were reached or not, if the pupils were happy and engaged in learning and "how the approach and methods used has helped or hindered pupils' learning" (Alison, Int. Quest14). They also state that they try to find additional strategies and methods that they can employ in future teaching by "reading various literature, sharing opinions with other colleagues and asking significant other experts". The teachers try the new strategies and methods with their pupils and "start evaluating and reflecting again - it is an ongoing process" (Alison, Observations June, 2008). Upon engaging in a process of reflection, teachers will not only become more effective but also intentional as they will act with knowledge and awareness (Osterman & Kottkamp, 2004).

In addition, the LML process also suggests that pupils become and develop into reflective practioners too. In being aware of self, children become independent and responsible learners. In most cases, the teachers encourage children to reflect on their own learning process and what is happening throughout. They do this in the most tangible way possible since they use the four LML soft-toys and the LML language. In doing so, they bring the hidden and invisible cognitive processes into a concrete and understandable way.

Effective teachers understand that children are not 'empty vessels waiting to be filled' (NMC, 1999). The teachers observed connect pupils' past knowledge and real-life experiences with present incoming information and then built on what the children already knew. In this, the Technical learners are included as they like to use their real life experiences.

Intentional teachers are more concerned with the process rather than the product of learning. Therefore, they make sure that all children know what is happening in their learning process. This is evident in the majority of the lessons observed. The teachers deliver lessons in small steps pausing long enough to ensure that pupils master each step as “if [children] don’t get step one, they definitely will not pick up on the other steps” (Alison, Observations, May 2008).

Effective teachers are organized and they give clear and detailed instructions and explanations. This is highly noted in Mandy’s and Alison’s classrooms – especially since they are score high in Precision. On the other hand, as Lisa is a Confluent learner, she finds it quite hard to offer a lot of detailed instructions and she feels challenged when faced by a group of Precise and Sequential learners. However, when interviewed she says that awareness in the LML helped her on how to forge her Precise and Sequential patterns to be able to provide sufficient instructions which are highly needed by the Precise and Sequential learners.

5.4 Theme 3: The Teaching and Learning Process

The main aim under this theme is to investigate how the strategies, language and techniques within the Let Me Learn framework, are used in the teaching and learning process to make both processes intentional.

It is a well known fact that each and every learner is different and unique thus a ‘one-size-fits-all’ approach to teaching is not effective (Gregory & Chapman, 2002). Every learner is thus distinct having his/her own strengths, weaknesses and also different learning patterns. This highlights the importance of differentiated instruction. When interviewed the four teachers consider

differentiation as being very important and is the hallmark of effective teaching and learning however, Mandy also states that if differentiation is done properly it is quite taxing and time consuming. The four teachers claim that they try to create effective strategies to support, challenge, and help their pupils learn in their own preferred way depending on the learning objectives however, this is not being successfully practiced in the lowest stream classroom. The data collected shows that the teachers differentiate both in terms of ability and learning patterns. Before undergoing the LML training programme, the teachers used to differentiate in terms of abilities only, however, they state that now that they know how their pupils learn, they differentiate tasks in terms of the pupils' learning patterns as well. In fact, as Alison understood how she and her pupils learn she;

“...was in a much better position to help [her] students use their full potential, to help them to understand that everyone learns differently and that that is O.K., and how their mental mechanisms work most efficiently for them”.

(Observations, May 2008)

Alison, Lisa and Mandy differentiate the teaching process by using various activities and approaches such as; hands-on tasks, movement activities, auditory activities, role-plays, problem-solving tasks, art and craft work and teaching through a multi-sensory approach. Maria is more inclined towards the traditional teaching however she is developing a more open approach by time. The former teachers try to include all the four learning patterns throughout the teaching and learning process to suit or challenge all their learners. However, the four patterns need not all be targeted in one lesson or activity as “children will get over-whelmed and lost...and they also need to learn to use the other patterns too” (Lisa, Observations, April 2008). What is important, as Mandy says, is that all the four learning patterns are fairly present in various teaching and learning activities over a period of at least a week.

The teachers sometimes differentiate in terms of the end product as they let the learners responsible to create and come up with their own finished result. For example; when doing project work, Lisa, let the learners free to create a finished product using their preferred learning patterns; the pupils who are high in Precision write a story, learners high in Technical Reasoning build a model and those high in Confluence draw or paint a picture. Here, the tasks and the pupils' learning patterns are congruent however, the teachers claim that they do not always present tasks which require the learners to use their preferred learning pattern. They believe that it is important for children to learn to use different patterns, skills and strategies and move away from their comfort zones. From the questionnaire results, twenty-three out of forty-two children like to use a pattern which they are not strong in as they like to learn more. On the other hand, nineteen find the task difficult, frustrating and boring if it is not congruent to their dominant learning patterns.

The in-class observations reveal that in the three mixed-ability classrooms where children are not streamed, the teachers support the pupils and also challenge the 'high-ability' learners. On the other hand, in the lowest-stream classroom, the teacher mostly focuses on helping or rather spoon-feeding the students rather than challenging them. It is also noted that the teacher holds low-expectations for them as '*dawn tad-D*' which should not be the case as children tend to perform according to the expectations teachers set for them.

The teachers share their views about collaborative learning. They all state that they make use of group and pair work in the teaching and learning processes as they believe that children learn more when working together. They group the pupils either according to abilities or learning patterns depending on the aim or task. Alison claims that classrooms engaged in collaborative learning "appear happier and infuse a more positive environment free from competition and stress thus more satisfied and successful learners". Although the teachers favour collaborative learning, they also present independent work where children work alone as they believe that it is also important that pupils learn how to master a task independently. They also do this to target the Technical learners

as they “like to work alone figuring things out” (Johnston, 1998, p.27). This is reflected in the questionnaire results as the Technical and Confluent learners choose that they prefer to work independently.

The LML gives the teachers the necessary language to communicate the reasons behind their intentional acts. This also applies for when the teachers share and explain the learning objective/s with the learners. This is almost always done in the lessons’ introductions. It is only in some instances, that the teachers refer to the learning objectives in the conclusion so as to recapitulate and assess whether the objectives were reached or not. Only one teacher writes the lesson objective on the whiteboard. It is rarely noted that the learning objective is mentioned throughout the development of the lesson. However, when asked, the teachers claim that they always keep in mind the learning objective throughout the whole lesson and try to guide and help the children in achieving it in the best possible way. Additionally, the LML process help the teachers relate a learning objective with a learning pattern by using concise verbs promoted by the LML process such as; ‘list, identify’ (Sequential pattern), ‘define, explain’ (Precise pattern), ‘*illustrate, build*’ (Technical pattern) and ‘imagine, design’ (Johnston, 1998).

The teachers use the LML meta-cognitive tools to further promote awareness of self and others, to build self coping skills and to engage the pupils in intentional learning. Both the Word Wall and Power Card enable learners to visualise what patterns they need to use and offer strategies on how to deal with a learning activity (Johnston, 1998).

All of the four teachers claim that they do keep in mind the learning patterns and needs of their learners when designing lesson plans and prepare resources. However, when observed this is not successfully equally mastered in all the four classrooms. Three teachers try to cater for all the learning patterns while the other teacher teaching the low-streamed classroom, constantly uses the same

patterns namely; the Sequential and Precise patterns and quite excluded the Confluent and Technical patterns. A good number of pupils are left out owing to the incongruence between the lessons' required patterns and their strongest learning patterns. This class out of the four observed has the highest number of pupils who use their Technical and Confluent patterns first – and their voice is not always listened to. However, through mentoring the teacher is moving towards addressing these learners.

This situation where the voice of the Technical and Confluent learners is not fully listened to might be a reflection of the wider schooling system; wherein such system requires more of the Sequential and Precise learners and rather exclude the Technical and Confluent learners (Johnston in Borg & Calleja, 2006). The same system which 'tries' to educate is in fact leading many students to experience failure. Therefore, if one is a Sequential or Precise learner, he or she is more likely to succeed and proceed to higher educational levels, whereas on the other hand if one is a Technical or Confluent learner, this might not be the case. On the contrary, such learner might be labelled as the 'unreachable', 'unengaged', 'unfocused' learner, hence the at-risk child (Borg & Calleja, 2006).

The Technical and Confluent patterns should not be neglected as they are the basis of creativity and innovation and these should be highly encouraged and celebrated even in the primary classroom.

From the observations, it can be concluded that the majority of the children who are labelled as 'less able' or 'failures' are Technical and Confluent processors. They 'failed' schooling, not because they are not intelligent but due to the contrast between their learning patterns and those demanded by the educational system. As a result, these children are being left out – and are labelled as being not capable and '*injoranti*' (ignorant) or '*batuti*' (slow). Shockingly this is also reflected in a teacher's comment when saying; "*...dak batut miskin ghax Tekniku*" (he's a Technical learner...that's why he's so slow).

This brings about another important issue, that is, the teacher's personal aptitude. The teacher's teaching approach, what does s/he believes and and

what does s/he practices in reality is as important as being aware in the LML process. Therefore, the teacher is also a determining factor in achieving intentional teaching and learning as “the LML alone does not work miracles... the teacher has to put that extra effort as well in order for children to increase their progress” (Lisa, Observations, May 2008).

The four teachers make direct reference to the four LML characters. They state that they find these characters very helpful especially in the Early Years classrooms as they facilitate learning and understanding. The four characters are part-and-parcel of everyday classroom life and there is a wonderful relationship between them and the pupils. In fact, Alison believes that, “...the LML programme in the early years wouldn’t have been so successful without the help of the LML characters” (Observations, June 2008).

Pupils make that extra effort when a character is placed on their desk hence such characters act as a stimulus for motivation. In identifying themselves with the characters, the children use meta-cognitive language and understand what they need to do to reach the goals therefore they are learning with intention.

The teachers encourage children to develop into intentional learners by asking them to think about what pattern/s they need to use prior starting working on a task. In most cases, the teachers do this by referring to the LML characters. The LML characters play an important role in creating intentional learners as the teachers refer to them when they want the pupils to tether or forge a learning pattern. The children understand better what is expected from them and move towards reaching that goal. This shows that children come to understand that they can ALL learn but in *different ways*, they can ALL do it but in *different ways*, they can ALL be successful by using *different coping strategies*.

Thus the LML process empowers the pupils to understand the process of their own learning. Such learners engage in a process of self-discovery, self-awareness and reflection. They start to analyse tasks independently and responsibly.

The LML process allows for flexibility in teaching and in learning. Being intentional also means being flexible as intentional teachers can adapt any learning situation or moments which unexpectedly happen during the process of teaching and learning itself. This is in line with what Mandy state when saying that intentional professional teachers “use their knowledge and experiences to organise positive learning experiences even when an unexpected learning situation arises – they should take advantage of it and stretch such experience so as to maximise meaningful learning”.

To teach with intention is to teach with a clear purpose in mind (Slavin, 2000). All the four teachers interviewed agreed that intentional teaching has its own benefits for both teachers and learners alike. “For the learner”, Alison stated, “it is beneficial because s/he can keep track her/his own development and progress since s/he would have clear purposes” in mind. For teachers, it is beneficial because...

“...through teaching with intention, teachers can make an adequate self-reflective exercise by [reflecting] and answering questions such as; what am I trying to accomplish? What are my learners’ needs? What resources do I need to match my learners’ learning patterns?”

(Alison, Observations June 2008)

5.5 Conclusion

Having explored intentional teaching and learning in terms of the LML theoretical framework, it is clearly evident that the LML process is a powerful instrument for achieving intentionality in teaching and learning. However, the LML approach alone is not enough. The teacher’s own personal approach that is, believing in the LML Process and that it can work for all the pupils is a necessary element. Engaging in reflective practice is also an essential factor in achieving intentional teaching and learning. Last but not least is the

importance of creating an appropriate classroom environment. Such an environment should nurture, support, and challenge pupils where they feel safe and encouraged to learn with intention.

***Conclusion and
Recommendations***

Conclusion and Recommendations

6.1 Introduction

This dissertation starts out by pointing the need to listen to the voice of the learner – the voice of learning. Effective teaching occurs when teachers listen to this voice of learning. In doing so, teachers would know and understand how their pupils learn best. As a result, they would be able to plan and construct lessons accordingly to meet and target all the learners' learning patterns.

This study aims to demonstrate the utility of the LML process as being an agent for intentional teaching. The LML process facilitates this, however, other instruments for reaching and achieving intentional teaching and learning are needed namely; reflective thinking and practice and the teacher's own willingness to unlock the children's will to learn.

6.2 Limitations of the study

The main limitation in this dissertation is mainly related to its small sample size. The findings presented in this study may not be generalized to all classroom settings since such findings are based on a rather limited sample of classrooms, teachers and pupils. However, the findings should be closely related to similar settings and situations.

Another limitation is time-constraint. Although dates for observation sessions were planned and set with the teachers before commencing the observation sessions, cancellations of such sessions was often encountered. This was due to unplanned school activities cropping up.

6.3 Research Expectations and Findings

As outlined in Chapter 1, this dissertation is guided by three main goals. These were reached as following;

The primary goal of this study is to find out how the teachers are using the LML process and framework to achieve intentionality in teaching and learning. This dissertation fulfills the first goal through; reading relevant literature, through observation sessions in four different classrooms and through interviewing the four teachers of the same classrooms. This is backed up by giving questionnaires to pupils.

The second goal is to seek and explore if there are other skills and/or strategies apart from the LML process which are needed to act with intention. Such information is gathered through the observations as they give the researcher deep understanding and insight. This is sustained by on-going and meticulous selection of various literature related to this study as presented in Chapter 2.

The third goal of this dissertation is to identify and explore the benefits of intentional teaching and learning. This is achieved by reading and evaluating various literature and theories and is corroborated with the observation sessions wherein incidents of intentional teaching and learning were highly paid attention to. The teachers also gave their own ideas and informed opinions about the benefits of teaching and learning with intention.

The combination of the methods used for data collection; observation sessions, interviews and questionnaires, were all used as best as possible and helped to achieve the above-mentioned three goals. Hence, this dissertation achieves its leading goals successfully.

6.4 Suggestions for further research

A continuation to this study could be a preparation of a teaching resource pack including different teaching methods and activities which are planned with intention to meet and target all the four learning patterns based on the LML theory and process.

Another interesting extension would be to base a qualitative and quantitative study on Technical and Confluent learners who are taught intentionally and others who are not and compare their attitudes to school, teaching, learning in general and their will and motivation to learn. Their personal self-esteem and labels given to them would be also investigated.

6.5 Conclusions

This study specifically focuses on teachers who received training in the LML process. It is evident that teachers who participate in the LML training programme are empowered to teach with intention, that is teaching deliberately and with planned and informed goals in mind (Sinatra, 2000) - the LML is a powerful tool in helping teachers achieve this. The LML process helps teachers to reach all the learners, maximize their full potential and help them flourish in their most preferred way. This will yield greater success in learning.

As outlined in the literature review (Chapter 2), teachers trained in the LML process, become more aware of the learners they have in the classroom.

The LML Process encourages meta-cognition, which is a process of thinking about thinking. The LML process offers meta-cognitive tools such as language and other resources; including the Power Card, the Word Wall and the four characters. Both teachers and learners alike engage in meta-cognitive processes throughout teaching and learning situations. They use the language promoted to make their inner thoughts heard and thus to understand one another better and in the best possible way. As outlined in Chapter 2 and 5, such resources

help the learners to analyse what patterns they need to stretch, tether or maintain in dealing and/or completing a learning task or activity. This makes them think and reflect on what they are doing and why. This brings up another vital driving instrument toward achieving/ engaging in intentional teaching and learning – reflective practice.

Reflective practice forms one of the pillars of both intentional teaching and learning. Intentional teachers are reflective teachers. All the teachers observed engage and reflect on their practice however every teacher in her most preferred way. Through such a process of informed thinking, teachers are able to identify the strengths and weaknesses particularly in the teaching process, thus are competent to modify and act with full awareness – hence with intention.

This study also found out that the teacher’s role and personality count in making teaching intentional. Knowledge in the LML process and engaging in reflective practice *alone* will not yield great results. These are the tools which help the teacher facilitate the journey however, the teacher still remains the ultimate powerful driving force as “teacher enthusiasm and willingness count as well.... teachers just have to believe in the LML, on what they’re doing and in each and every learner” (Jacqueline, Observation April 2008). Therefore, teachers need to believe in what they are doing, in the benefits of such an approach and should be willing to change, adapt and implement the theories and strategies suggested – keeping in mind the needs and requirements of each and every pupil.

In summary, the LML Process together with an ongoing process of reflective practice and the teacher’s effort, willingness and belief that ALL learners can

succeed (even if in other ways different than hers/ his) are the most basic and essential agents for intentional teaching and learning.

If 'for every child to succeed' is the ultimate aim in education – then teachers should be open and listen to the quiet voices of each learner – which is yet so very powerful – the voice that yearns for one thing; “Let *Me* Learn” (Johnston, 1998).

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Appendices

***Observation
Checklist 1***

Observation session 1			
Theme: <i>Classroom Environment and Organisation</i>			
Teacher:	School:	Year:	
Date:	Time:		
Points/ strategies to observe	Yes	No	See additional notes
1.1) Positive climate			
1.2) Child-friendly environment			
1.3) Setting invites learner collaboration			
1.4) Seating arrangements promotes collaboration			
1.5) Interest centres			
1.6) Quiet areas to work alone			
1.7) Materials displayed on classroom walls			
1.8) LML resources			
1.9) Positive psychological environment			
1.10) Flexible physical environment			

1.11) Environment is conducive to learning			
1.12) Environment is inclusive			
1.13) Environment is accepting			
1.14) Nurturing environment			
1.15) Supportive environment			
1.16) Challenging environment			

***Observation
Checklist 2***

Observation session 2			
Theme: <i>Teacher Effectiveness</i>			
Teacher:	School:	Year:	
Date:	Time:		
Points/ strategies to observe	Yes	No	See additional notes
2.1) Know the subject/ content knowledge			
2.2) Teacher pre-assess pupils' knowledge			
2.3) Motivate learners			
2.4) Account for individual learners			
2.5) Assess learning outcomes in relation to learning patterns			
2.6) Review & consolidate information/ topics			
2.7) Deal with misconceptions			
2.8) Communicate effectively			
2.9) Teacher sets out and communicate clear objectives and expectations			
2.10) Teacher is positive			

2.11) Good relationship with pupils			
2.12) Engage in reflective practice			
2.13) Teach with a purpose/ goal in mind			
2.14) Teacher is self-knowledgeable			
2.15) Know the students through good communication skills			
2.16) Is aware of all the learning patterns			
2.17) Encourage students to take risks			
2.18) Encourage students to tether/ forge a learning pattern			

Observation

Checklist 3

Observation session 3			
Theme: <i>The Teaching and Learning Process</i>			
Teacher:	School:	Year:	
Date:	Time:		
Points/ strategies to observe	Yes	No	See additional notes
3.1) Differentiation by ability			
3.2) Differentiation by learning patterns			
3.3) Support/ challenge children			
3.4) Use of resources			
3.5) Use of different teaching methods			
3.6) Creative and effective introductions			
3.7) Share lesson aims/ objectives			
3.8) Conclusion of lessons: assess, reflect.			
3.9) Questioning techniques: open-ended questions			
3.10) Questioning techniques: close-ended questions			

3.11) Lesson pace is appropriate for learning			
3.12) Different tasks to target different learning patterns			
3.13) Active learning			
3.14) Passive learning			
3.15) Teaching is planned with patterns in mind			
3.16) Language focuses on learning and meta-learning			
3.17) Time-on task			
3.18) Teacher & students identify learning patterns			
3.19) Teacher & students do 'Task Analysis'			
3.20) Students are in charge of own learning			
3.21) Learning strategies to support learning			
3.22) Use of task-appropriate strategies			
3.23) Congruence between teacher & students' learning patterns			
3.24) LML language			

3.25) LML characters			
3.26) Cue Words Wall			
3.27) Use of Power-Card			
3.28) Intentional teaching strategies			
3.28) Meta-awareness in learning			
3.29) Assessment & Feedback			
3.30) Collaborative learning; group work/ peer tutoring			
3.31) Communicating internal thoughts with outside world			

Appendix 4

Interview - Teacher 1

Q. 1: How would you define an effective teacher?

Effective teachers have to be enthusiastic and knowledgeable about what they are teaching. They have to be genuinely interested in all of the children's progress. They have to be able to communicate clearly, set learning objectives, be flexible, be conscious of children's individual learning differences and respect them by adapting their instruction so as to meet their students' level of knowledge and skills. They review prerequisite knowledge as the foundation for new knowledge. They plan their work and are familiar with current research. They allow time for their students to ask questions while also probe questions that require the students to reflect, evaluate and connect ideas. They provide adequate opportunity for mastery of a task by making sure that the concepts are well understood before asking students to apply them. They provide adequate feedback to the students while also be able to evaluate and reflect on their own practice and use this information to improve. Effective teachers use a variety of instructional strategies while giving importance not only to knowledge content but also to self-esteem and motivation while also taking into consideration and respond to the different rate of response of the children. Effective teachers have to be able to create opportunities for positive learning experiences to take place. There is much more that can be discussed about effective teachers such as time management and classroom management but I think I gave some of the most important ideas about what in my perspective makes an effective teacher.

Q. 2: In contrast, what makes a less effective teacher?

A less effective teacher is the one who ignores all of the above and who does not respect her students and does not take a genuine interest in their progress and who is not interested in improving professionally.

Q. 3: When do you know that learners are getting what do you want to teach?

There are various and several ways of getting feedback about what the children are learning. This could be either in oral or in written form or in any other way the learners would prefer to show what they have learned. It much depends on the learning objective set.

Q.4: How has the LML training influenced you as a teacher?

I knew about LML before I did the training, and the experiences and literature I read about LML helped me to become the teacher I am today. LML with all its theoretical background influenced me a lot. The LML training helped me to share my knowledge and experiences with others while encouraging me to keep on making use of LML in the classroom.

Q.5: How has the LML Process enabled you to intentionally select strategies that allow you to achieve your lesson goal/s more effectively?

Before knowing about LML, I just knew that children learn differently but I did not understand why and how they learn differently and so I could not respond adequately to these differences. With an awareness of LML I understood why and how children learn differently and I was in a better position to respond to these differences. Having clearly understood how children learn I was better equipped to intentionally select strategies that allowed me to achieve my lesson goals more effectively.

Q.6: Was the course useful to help you differentiate your teaching? In what ways?

LML is extremely helpful to me to be able to differentiate my teaching because since now I had the knowledge how children respond differently to incoming information and I also understood how I learn I was in a much better position to help my students use their full potential, to help them understand how they learn and how their mental mechanisms work most efficiently for them. When preparing a particular learning programme I always take into consideration the four learning patterns and I make sure that my instructional strategies and activities vary so as to respond to different learning patterns.

Q.7: Do you think there is a relationship between a teacher's learning preference and his/her teaching style? Give personal examples.

I do believe that there is a direct correlation between a teacher's learning preference and his/her teaching style. For example, before knowing about LML, I used to instinctively prepare my lessons with a lot of notes, information from books and I always gave step by step directions. I always thought that giving out a lot of information in an organised manner was the best way of teaching.....since I myself learn best in this way. However, with an awareness of different learning patterns I realised that this way of

teaching was frustrating for particular learners and I wasn't helping them at all to learn. Therefore, nowadays I am more careful so as to be more creative, more flexible and allow more space for the Technical pattern to feel comfortable in my lessons since this is the pattern that I avoid and so I never made use of it in my instruction.

Q.8: Can you please share some experiences when you had to tether or forge your patterns to accommodate a pupils' learning preference?

This happens every day in my classroom and now I have got used it and it does not bother me at all. Scoring high in precision and sequence I tend to explain in detail, give long notes, give a lot of importance to books, structure my instruction etc.....Nowadays, I am aware that if I let these patterns take over there would be children who are not interested in details to just shut me out and in this way I lose them while they might also become demotivated, therefore I have learnt to tether these two learning patterns with children who don't prefer to learn in this way. I also score high in confluence so at times I tend to just have an idea in the middle of a task and I would want to carry it out! This made some children panic and feel lost since they wouldn't feel comfortable to just stop in the middle of the task and start on something else. Being aware of this I also had to tether my confluence and nowadays before performing any idea that comes to my mind I prepare the children who need this security. Scoring 9 in Technical reasoning, I was, needless to say, not responding to these kind of learners since, without knowing, I never used to include it in my instruction. Nowadays, I am aware of the importance of responding to those learners who use first or use as needed the Technical reasoning and therefore I had to forge this learning pattern. But I have to say, that I needed help and so in my classroom I always have a learning support assistant who scores high in Technical reasoning because by discussing with her my plans and listening to her perspective I make sure that I am responding adequately to this learning pattern.

Q.9: Do you think that knowing the pupils' learning patterns is important? If Yes/ No, Why?

Without an understanding of how and why children learn differently, I would be leaving behind many learners and would give them a negative learning experience. Without an awareness of different learning patterns I would not be reaching my aim, that is, that every learner succeeds.

Q.10: What are your views about collaborative learning?

I firmly believe that students learn best when they are actively involved in the process and one way of doing this is through collaborative learning. My personal experience reveals that students working in small groups tend to learn more about what I am trying to teach and seem to retain it longer than if I present the same content in a different way. Moreover, I observed that the classroom which makes use of collaborative learning effectively appear happier, that is to say, the children feel more satisfied in this kind of classroom.

Q.11: Do you consider the children's pattern strengths when organising collaborative groups? Why?

I learnt to vary my strategy depending on my learning objective. Sometimes I form the groups ad hoc but on other occasions I grouped the children according to their learning pattern. It all depends on what my objective would be.

Q.12: What other considerations do you consider important when forming collaborative groups?

There are many other considerations which are important and here is a list of some of them:

- plan the number of students in each group
- explain carefully how the groups will operate and what is expected of them
- create a task for the group work which requires interdependence
- make sure that an evaluation of how the group worked together after the task.

Q.13: Do you see any connections between the children's work/ process of learning and their learning preferences?

Yes I see a strong connection between the children's work/process of learning and their learning preferences.

Q.14: Reflective practice is a meaningful and effective way of thinking which encourages personal learning, behavioural change and improved performance (Osterman & Kottkamp, 2004). How much do you think this is true? How do you do your reflection as a practitioner?

I fully agree with the above and I recommend that each and every teacher should go through the process of self reflection. Being a reflective person by nature, I am always thinking and evaluating my practice so as to improve. Without having reflected, asked questions and trying to find an answer to them I wouldn't have been the kind of teacher I am. As a practitioner I reflect on my practice and how it helped or hindered my students' learning, then I formulate questions and I try to find an answer to them by reading various literature, sharing with other colleagues and asking other experts. Then I go back into the classroom and try it out and then I start evaluating and reflecting again.....it is an ongoing process!! And I am still learning new things!!

Q.15: What are your views about 'intentional teaching' that is, teaching with full awareness and with a purpose? Do you consider this approach as beneficial? Why?

Teaching with intention is to act with a purpose, with a goal in mind and plan to accomplish it. Professional teachers have to use their knowledge and experience to organise positive learning experiences for their students and whenever an unexpected learning situation arises, effective teachers should take advantage of it. Intentional teaching is beneficial both for the learner and the teachers. For the learner it is beneficial because one can keep track of one's own development and progress since one would have clear purposes. For the teachers it is beneficial because through teaching with intention, teachers can make an adequate self-reflective exercise by answering questions such as: what am I trying to accomplish? What are my learners' needs? What resources do I need? Was my strategy good or do I need to change it? etc...

Q.16: How do you embed the LML concepts into lesson planning?

When planning my lessons I take into consideration the four different learning patterns and I make sure that I cater for each and every pattern.

Q.17: How did the implementation of the LML programme contributed towards pupils' progress and success?

One of the most factors that contributed towards the learners' progress and success was the fact that the 'language' used in the classroom has changed. For example, if before I would hear statements such as "miss I am not good at this", "miss I don't know how to do it", "missis slow, she does not

know anything”, Nowadays I am hearing different statements such as “miss I need Fina to do this” “miss Zringi is making me go crazy I need to quieten her a bit”. What I mean to say, is that the children through the implementation of the LML programme have come to an understanding that they can ALL learn but in different ways, they can ALL do it but in different ways, they can ALL be successful by using different coping strategies. Since now everyone understands that everyone can learn, motivation has increased and success has become more possible.

Q.18: How did the LML training programme empower you as a teacher?

LML training programme empowered me as a teacher since I am now more confident in what I am doing.

Q.19: What is the relationship between the pupils and the LML characters (soft toys)?

The LML programme in the early years wouldn't have been so successful without the help of the LML characters. The children can easily identify themselves with the characters and so they have a better understanding of the different learning patterns. There is a wonderful relationship between the pupils and the LML characters.

Q.20: Do you use them often? How often and why?

The LML characters are used daily and regularly in the classroom. They facilitate the children's understanding of the different learning patterns.

Q.21: How do you think these characters help the children in their learning process?

These characters help the children in their learning process since understanding how each character learns, they can identify themselves with them and so come up with strategies to help them make the best of their learning pattern.

Q.22: The LML process focuses on child-centred learning. How important do you deem this?

I truly believe that prevalent education is moving towards making learning a meta-learning experience. For me this means that teachers are no longer

supposed to transfer facts into passive learners' heads but they are supposed to motivate children and empower them to discover new skills and knowledge. With an understanding that children respond to incoming information differently, the teacher has to truly focus on the learner so as to be able to equip him/her with how he/she can be successful in any learning domain. To be able to do this, a teacher needs to know what goes on in the learners' heads and LML process reveals the answer to this question while giving specific strategies.

Q.23: How important is for pupils to move beyond their 'comfort zones' and take ownership of their own learning?

The more the learners take ownership of their own learning, the more they are likely to be successful in future learning and new tasks.

Q.24: Finally, do you think that being aware of the pupils' learning patterns helps you to develop more appropriate resources, tasks and teaching methods?

Obviously yes, since developing resources tasks and teaching methods which would respond to the learners' different learning patterns would lead to a much more positive learning experience for the pupil because it would be more relevant and meaningful to how they learn and therefore more motivating and empowering.

Thank you !

Appendix 5

Interview - Teacher 2

Q.1: How would you define an effective teacher?

Someone who can understand the needs of the individual child and work with the individual to move along not just dealing with a mass of children.

Q.2: In contrast, what makes a less effective teacher?

Lack of preparation, when the teacher works in isolation – and is not open to other ideas or suggestions.

Q.3: How has the LML training influenced you as a teacher?

A lot! Before I couldn't deal and understand the pupils who ask a lot of questions – to me they were 'silly ones'. The LML made me understand myself as a learner, as a teacher, the pupils I teach and the people I work with.

Q.5: How has the LML Process enabled you to intentionally select strategies that allow you to achieve your lesson goal/s more effectively?

You learn how to reach all patterns thus you try to produce work accordingly and involving all the learning patterns.

Q.6: Was the course useful to help you differentiate your teaching? In what ways?

I wasn't aware of differentiation before. It was helpful but I need some fine-tuning when dealing with differentiation in large groups. Know it can be done but not so sure how.

Q.7: Do you think there is a relationship between a teacher's learning preference and his/her teaching style? Give personal examples.

Yes. I'm low in Technical – and the Technical work I produce in class is somewhat limited.

Q.8: Can you please share some experiences when you had to tether or forge your patterns to accommodate a pupils' learning preference?

When it comes to pupils who are high in Sequence and Precision, I try to accept that they have to ask a lot of questions. For example, I usually do the

pre-reading tasks in a very confluent way – but now I also offer the option to pupils to write in list form.

Q.9: Do you think that knowing the pupils' learning patterns is important? If Yes/ No, Why?

Definitely yes... you can understand them better – help them to learn and help you to teach. You teach them how they learn!

Q.10: What are your views about collaborative learning?

I use it a lot. You have to be aware of what goes on in the group. You have to know the children well before you group them.

Q.11: Do you consider the children's pattern strengths when organising collaborative groups? Why?

Sometimes I do. In the majority I try to vary the patterns within the group – as putting all the same patterns together doesn't work.

Q.12: What other considerations do you consider important when forming collaborative groups?

Personal characteristics – I am aware of the 'bossy' children, the shy ones and the very talkative ones!

Q.13: Do you see any connections between the children's work/ process of learning and their learning preferences?

Definitely. Not only in their work but even the way they organise work and under their desk. Before the inventory, I could tell what patterns they use.

Q.14: Reflective practice is a meaningful and effective way of thinking which encourages personal learning, behavioural change and improved performance (Osterman & Kottkamp, 2004). How much do you think this is true? How do you do your reflection as a practitioner?

It's 100 percent true. By nature I am a very reflective person – from one year to the next I always try to do things better. When I go home, I like to sit down and reflect on the day; what went wrong, etc...

Q.15: What are your views about 'intentional teaching' that is, teaching with full awareness and with a purpose? Do you consider this approach as beneficial? Why?

I think it is beneficial. Most of the teaching I do is intentional... but incidental teaching sometimes is more effective to children – so it has to be a bit of both.

Q.16: How do you embed the LML concepts into lesson planning?

First I plan lessons in general... then I try to include most of the patterns – but not all four patterns in one lesson. Children need to learn to use the other patterns too.

Q.17: How did the implementation of the LML programme contributed towards pupils' progress and success?

They like to work with LML. It's quite a different concept to see the benefit of learning how to learn, however they are becoming more aware. The teacher has to do most of the job in order for children to progress.

Q.18: How did the LML training programme empower you as a teacher?

It did, cause I was able to get to know myself as a teacher and give me the tools to work with, for the benefit of the children.

Q.19: What is the relationship between the pupils and the LML characters (soft toys)?

The soft-toys are the things they are most attracted to. They love them greatly! They see them as other children.

Q.20: Do you use them often? How often and why?

I use them often... mentioning their names throughout the lessons, everyday!

Q.21: How do you think these characters help the children in their learning process?

They help them to make an effort and guides them on how to work on a task.

Q.22: The LML process focuses on child-centred learning. How important do you deem this?

Extremely important... I really believe in that. If you don't give importance to the child, you're just a teacher.... however it is a challenge!

Q.23: How important is for pupils to move beyond their 'comfort zones' and take ownership of their own learning?

That's what the LML does.... the role of the teacher is actually this - to challenge them!

Q.24: Finally, do you think that being aware of the pupils' learning patterns helps you to develop more appropriate resources, tasks and teaching methods?

Yes... you also learn that not every resource has to fit the pattern but rather children learn how to use their patterns to fit the resources.

Thank you !

Appendix 6

Interview - Teacher 3

Q.1: How would you define an effective teacher?

An effective teacher would make a difference in student's lives. Her role is not that of imparting knowledge, but of making learning an enjoyable experience.

Q.2: In contrast, what makes a less effective teacher?

If a teacher is intent on cramming students with large amounts of information, without taking into account the students' learning needs, then she would not be so effective.

Q.3: When do you know that learners are getting what do you want to teach?

When they are able to explain a concept I have taught them in their own words.

Q.4: How has the LML training influenced you as a teacher?

Let me Learn has made me much more aware of the fact that different students have different ways of learning and I keep this in mind during the planning stage and especially during teaching itself. I am more aware of which students may find certain tasks difficult (for example if a task is sequential, I know that students who are low in sequence may encounter difficulties), so I try to use language which they will understand, and keep an eye on them while they are working.

Q.5: How has the LML Process enabled you to intentionally select strategies that allow you to achieve your lesson goal/s more effectively?

The fact that I know my learners' learning patterns has helped me to vary tasks so that all learners can find them meaningful. For example during last scholastic year most of my learners were highly Technical, so I tried to include 'hands on' tasks in my lessons, even if it just meant that learners were sticking flashcards on the whiteboard, rather than doing it myself. This year students tended to be high in sequence and precision, so when we were tackling tasks which required the other 2 learning patterns, I could suggest strategies they could use to complete their task successfully.

Q.6: Was the course useful to help you differentiate your teaching? In what ways?

Before attending the course I only considered differentiated teaching as teaching children with different levels of intelligence. Now I am conscious that differentiated teaching also means teaching children with different learning patterns, and I try to keep this in mind especially during the planning stage.

Q.7: Do you think there is a relationship between a teacher's learning preference and his/her teaching style? Give personal examples.

Yes, I think the teacher's learning preference influences her teaching style. For example I am high in sequence and precision, so I tend to go through an explanation step by step. I often try to give some background information. I have a certain routine in the classroom, for example I always write what children have to do for homework on the whiteboard, and they are expected to copy it down in their notebook.

Q.8: Can you please share some experiences when you had to tether or forge your patterns to accommodate a pupils' learning preference?

As I have already mentioned in question 5, last year I had to stretch my Technical pattern as it is really low, while my students were really high in this pattern. This year I had quite a number of students who were high in confluence, another pattern which I often need to stretch. So I often have to stretch my own confluence to think up of activities which confluent and Technical students would find stimulating. I have also learnt to tether my precision, for example during social studies lessons, where I try to avoid giving huge amounts of background information which my students would probably find overwhelming.

Q.9: Do you think that knowing the pupils' learning patterns is important? If Yes/ No, Why?

It is definitely important as I can plan/ modify my lessons to suit their patterns. Moreover knowing their learning pattern makes me aware of certain difficulties some pupils might encounter during particular tasks, and also who, among the pupils themselves, will probably be able to help peers who encounter difficulties. Knowing their pattern may also explain certain pupils' behaviour, for example if someone's always asking questions about how s/he should be doing a task, and I know s/he is high in sequence, then I

know that s/he's doing so because s/he really needs to check and not because s/he was not paying attention.

Q.10: What are your views about collaborative learning?

It can work but the main problems I find are:

- Sometimes there are many children with similar learning patterns within the class, so it is difficult to have variety within a group.
- Some children find it uncomfortable working within a group.
- Sometimes children end up chatting/ bickering rather than working
- Since I teach children in the lowest stream I often tend to have children who suffer from conditions (such as ADHD), emotional or psychological problems. These children may be disruptive within a group.

Q.11: Do you consider the children's pattern strengths when organising collaborative groups? Why?

Yes, I try to have children with different patterns within each group, so that each child can participate and give his/her contribution within the group.

Q.12: What other considerations do you consider important when forming collaborative groups?

I try to 'disperse' disruptive or over-enthusiastic children within different groups to minimise conflicts.

Q.13: Do you see any connections between the children's work/ process of learning and their learning preferences?

Yes, sequential children are often neat and organised and hardly ever forget their homework. Precise children often complain that they don't have enough space to write in, especially in their English workbook. Technical children may be rather disorganised and often give their answers in one word, even when they are supposed to write a complete sentence. Confluent children are always asking why – Why do we have to do this in a certain way? Is it ok if we do it this way? Can we do something else instead of this?

Q.14: Reflective practice is a meaningful and effective way of thinking which encourages personal learning, behavioural change and improved

performance (Osterman & Kottkamp, 2004). How much do you think this is true? How do you do your reflection as a practitioner?

I try to be aware of the children's reactions and behaviour during the lesson and identify any points, aspects within the lesson which need to be improved or modified. I sometimes pencil in a short note on my lesson plan so that I can remember anything important which I need to change within the lesson.

Q.15: What are your views about 'intentional teaching' that is, teaching with full awareness and with a purpose? Do you consider this approach as beneficial? Why?

I think this approach is highly beneficial, especially with the kind of children I teach, as it helps me to focus on what I really want my students to learn and helps me to avoid lumping too many teaching points together. Moreover it makes it easier for me to check if the children have learnt what I wanted them to learn.

Q.16: How do you embed the LML concepts into lesson planning?

I usually add notes at the side as to which teaching points will appeal to students with particular patterns. I also make a note of which teaching points will be difficult for the children.

Q.17: How did the implementation of the LML programme contributed towards pupils' progress and success?

Maybe with the kind of children I teach, their success is not visible in exam or test results, as a lot of them have a variety of problems. But I think that the fact that they have become aware of their own learning process, their own learning pattern, and the fact that they can use let me learn discourse to describe the way they are learning, or the way they need to use a pattern different than their own; all this is itself an achievement, especially for children who the present educational system has already labelled as 'failures', even at such an early age. Now **they** know they are not failures, and for me that is the greatest achievement they can get as learners.

Q.18: How did the LML training programme empower you as a teacher?

First of all LML has given me a new insight about myself. I have come to understand myself and the reason for my reactions to certain situations – I am high in sequence and when things don't go according to plan, I tend to get upset. LML has helped me to understand why I get upset, and it often helps me to put things into perspective. All this has helped me understand my pupils much better. I can empathise the frustration sequential children feel when instructions are not clear enough. Throughout my years as a teacher I have often come across children who are clearly intelligent, but seem to have no interest in learning (probably because they were highly Technical or confluent). LML has given me the means to reach these children and make learning meaningful for them as well.

Q.19: What is the relationship between the pupils and the LML characters (soft toys)?

When I showed them the soft toys, the children were very curious about them. Even though they are 10 years old, they do not seem to think the soft toys are a babyish idea. They identify themselves with them as I often hear comments like; "She's like me.... I'm like that..." especially when I am describing the characters.

Q.20: Do you use them often? How often and why?

I use them quite often, especially when we have a new lesson or a new task. After explaining what they have to do, I ask the children which character would be best at that particular task and why. When they decide about the character I put it in a prominent place in class. Sometimes I give it to a particular student who I know will find that task particularly difficult, saying that *Geru* for ex, is going to help him or her especially. The children enjoy this a lot, and they do make that extra special effort when a soft toy is on their table.

Q.21: How do you think these characters help the children in their learning process?

I think the characters help them to focus on the skills they need when they are learning something. They also make them aware of their own strengths and weaknesses, and to a certain extent the children become aware of the way they learn.

Q.22: The LML process focuses on child-centred learning. How important do you deem this?

Child-centred learning is of utmost importance, if children cannot see any relevance in what they are learning, they will find it difficult to learn.

Q.23: How important is for pupils to move beyond their 'comfort zones' and take ownership of their own learning?

With my students this is extremely important. Because of the present examination system they have already been labelled by the system, and very often by their parents, as 'ignorant', and its very easy for them to believe that they can't learn anything. This often leads to an attitude of 'laissez-faire', and I often hear remarks like '*Jien mhux tajjeb.....Din tqila wisq.....Jien xejn ma naf*'. I think that LML is a very effective tool in empowering these students to identify the way they learn and most importantly it helps them use strategies when dealing with difficult tasks. LML also helps them to realise that no-one is 'hopeless', everyone has different abilities.

Q.24: Finally, do you think that being aware of the pupils' learning patterns helps you to develop more appropriate resources, tasks and teaching methods?

Yes it does. I try to include resources and tasks which would appeal to children with different learning patterns. This might not be possible within the same lesson, but I try to have variety within the day, or at least within two or three days so that all children will find learning interesting.

Thank you !

Appendix 7

Interview - Teacher 4

Q.1: How would you define an effective teacher?

One who can engage all pupils in learning, is understanding and supports the strengths and identifies the weaknesses of the pupils.

Q.2: In contrast, what makes a less effective teacher?

Someone who passes on information and reaches a section of the class and not leave scope to learn from the pupils themselves.

Q.3: When do you know that learners are getting what do you want to teach?

When they start thinking for themselves and teaching me something in return.

Q.4: How has the LML training influenced you as a teacher?

Now that I am aware of my learning patterns I keep the other learning patterns in mind when I plan my lessons.

Q.5: How has the LML Process enabled you to intentionally select strategies that allow you to achieve your lesson goal/s more effectively?

Since I know that I am high on precision and sequence I strive to include the other learning patterns in the lessons as well as I identify the tasks at hand together with my pupils and we discuss what strategies would best suit to complete the tasks and reach the objectives.

Q.6: Was the course useful to help you differentiate your teaching? In what ways?

I teach in a mixed ability classroom and at the best of times this is very demanding and time consuming – getting the pupils to get to grips with their learning patterns and trying to help themselves and others has been a relief –so the course has been a very useful tool.

Q.7: Do you think there is a relationship between a teacher's learning preference and his/her teaching style? Give personal examples.

Definitely for example as I said I am high on precision and sequence so I tend to give a lot of information and I tend to give examples and break it

down in steps so much that the Technical and confluent ones often tell me – ok may we start now and get on with it?

Q.8: Can you please share some experiences when you had to tether or forge your patterns to accommodate a pupils' learning preference?

I really have to stretch my Technical pattern when I am faced by a Technical learner – I have had to present my lessons quite differently to these pupils to make things more tangible for them.

Q.9: Do you think that knowing the pupils' learning patterns is important? If Yes/ No, Why?

Yes. I feel it has helped me understand the pupil's needs and their learning processes much more.

Q.10: What are your views about collaborative learning?

I believe that both pupils and learners can benefit from it after all isn't the classroom a reflection of society? – people are all different and the way that I do things is not necessarily the only way!

Q.11: Do you consider the children's pattern strengths when organising collaborative groups? Why?

I actually arrange my groups to have a representative from each learning style for better group dynamics and to help each other complete the tasks.

Q.12: What other considerations do you consider important when forming collaborative groups?

I try to explain to the pupils what the groups are about – to whom they're going to refer if they are stuck – I explain that all learning patterns are important and contribute to the group.

Q.13: Do you see any connections between the children's work/ process of learning and their learning preferences?

Very much so, by looking at the children's work I usually have a very good idea of what the learning preference is- before we do the inventory.

Q.14: Reflective practice is a meaningful and effective way of thinking which encourages personal learning, behavioural change and improved performance (Osterman & Kottkamp, 2004). How much do you think this is true? How do you do your reflection as a practitioner?

I think that as a practitioner this has helped me to understand my thought processes, the way I present and impart my lessons- and at the end of the day I try to assess myself if I have managed to reach as many pupils as possible – ideally all!

Q.15: What are your views about ‘intentional teaching’ that is, teaching with full awareness and with a purpose? Do you consider this approach as beneficial? Why?

I actually prefer this style – I usually outline the objective of the lesson and write it on the board for all to see and then we set about reaching that objective – however I leave myself open enough for accidental teaching.

Q.16: How do you embed the LML concepts into lesson planning?

I usually identify which learning process the task requires and then try to address all styles or incorporate as many different tasks /styles as possible in the lesson.

Q.17: How did the implementation of the LML programme contribute towards pupils’ progress and success?

My pupils have enjoyed learning about their learning styles and identifying with their peers, their teachers and the characters – I feel that it empowers them to grow – to start thinking for themselves.

Q.18: How did the LML training programme empower you as a teacher?

I am very much aware of who I am now – what makes me tick and why I behave in certain ways when faced with particular pupils – it has helped me to relax as a teacher and not to be so hard on myself – there is a reason why I don’t always seem to get through!

Q.19: What is the relationship between the pupils and the LML characters (soft toys)?

My pupils (seven year olds) love the characters- they love to handle them and work with them they become their friends and an extension of them by the end of the year. They often identify themselves with them too.

Q.20: Do you use them often? How often and why?

From the second term onwards the characters are always around the classroom and they are used continuously to help pupils identify tasks and which patterns they need to use.

Q.21: How do you think these characters help the children in their learning process?

To be able to identify yourself with someone or something and to understand a little better why you are good at learning certain things and not others comes as a relief to the pupils.

Q.22: The LML process focuses on child-centred learning. How important do you deem this?

In our society were each individual is unique I deem this to be very important – the LML enhances this.

Q.23: How important is for pupils to move beyond their 'comfort zones' and take ownership of their own learning?

I feel that this is very important so that pupils share the responsibility of learning - they learn at the outset that learning is an ongoing process and that there isn't just one way of learning.

Q.24: Finally, do you think that being aware of the pupils' learning patterns helps you to develop more appropriate resources, tasks and teaching methods?

A lot more thought goes into developing the resources now – I tend to vary the tasks and I am more on the lookout as to who would benefit from that resource /task.

Thank you !

Appendix 8

The Questionnaire

How do you learn best?

Questionnaire for Children

About you: Boy: Girl:
Age: _____ Year/ Grade: _____

Now, please answer the following questions. Put **one** 'X' for each question.

1) Do you like to learn new things?

Yes Not Always No

2) Where do you like to learn best?

In class In a library In the playground

In IT/PC lab At home In sports lessons

Other Where? _____

3) How do you learn best? I learn best when:

Seeing and listening Drawing Reading
Studying Doing things Writing

4) Your friend needs help in her/his class work. Do you help her/him?

Yes Not Always No

5) Answer this question if you said 'Yes' or 'Not Always' in Question 4. What do you do to help your friend?

I show I teach/ explain I draw
pictures

6) How do you like to learn/work best?

Alone With a friend In a group

7) Why do you like to learn/work; (please write why near the one you chose in Question 6).

Alone:

With a friend:

In a group:

8) You use four soft-toys which are: Geru, Fina, Faru and Zringi?
Who are these?

9) Do you think that Geru, Fina, Faru and Zringi are helpful?

Yes

No

10) Why do you use them?

To help us learn

To learn how to use all patterns

To help us solve problems
more

To help us understand our lessons

11) Which of these characters learn like you the most?

Geru

Fina

Faru

Zringi

12) The teacher asks you to use a character which you do not resemble. Do you like to use it?

Yes

No

13a) Answer this question if you ticked YES in Question 12. Why do you like to use a character which does not learn the same as you do?

I might need it I like to learn to do everything

It still teaches me something new I like the soft-toy

13b) Answer this question if you ticked 'NO' in Question 12. Why you don't like to use a character which doesn't learn the same as you do?

Activity is boring

Activity is difficult

It doesn't learn like me

I don't like the soft-toy

Write the scores of your learning patterns below:

S: ____ P: ____ T: ____ C: ____

Thank you! 😊

