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**INTRINSIC AND EXTRINSIC MOTIVATION IN MONTESSORI SCHOOLS:  
TEACHERS SPEAK**

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**SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE  
DEGREE OF MASTER OF EDUCATION**

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## **Abstract**

In my study I examined the practices of Montessori educators in motivating children in a classroom setting. I interviewed 6 Montessori educators from various schools in the eastern, southern and northern parts of Ontario to share their first hand experiences and knowledge. Although these Montessori educators believe that intrinsic motivation without extrinsic should be sufficient motivation the results from the study indicated that 5 of these 6 teachers employ both intrinsic and extrinsic motivation to keep the children on task and interested in their work. The findings indicate that only 1 educator utilizes intrinsic motivation exclusively. The results indicate that 5 of the 6 participants believe that children require the addition of external factors, such as praise, achievement levels and stickers, free and self directed time to motivate students to complete their work.

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## CHAPTER ONE: INTRODUCTION

### Purpose of the Study

There are many demands placed on educators, which arguably begin with curricular expectations. In this study I was interested in how educators in grades 1 through 3, in the lower elementary Montessori classroom, motivate their students and keep them on task. Specifically I was searching for strategies of intrinsic and extrinsic motivation that are utilized in the classroom.

The overarching research questions for this study are as follows:

1. How do Montessori educators keep children on task?
2. Do Montessori educators use intrinsic or extrinsic motivation or both?

Researchers, teachers, and parents generally agree that children should be afforded opportunities to succeed by functioning at their optimal levels (Coloroso, 1999; Kohn, 1999, 1999; Montessori, 1966, 1967, 1994, 1995). There are many articles and books describing the use of extrinsic rewards given in the classroom and the many consequences on children's inner motivation and drive (Artiles & Clark, 2000; Clayton, 2002; Coloroso,; Covington, 2000; Kohn, 1993, 1999; Lepper & Greene, 1973; Newby, 1991; Woodward, 1996). The pertinent literature compares and contrasts external rewards (extrinsic) with internal motivation (intrinsic) and analyzes the outcomes of each in relation to children and their motivation (Cameron & Pierce, 1994; Covington; Kohn, 1993, 1999; Lepper & Greene). There appears to be a lack of research specifically relating to the Montessori experience regarding intrinsic motivation and extrinsic rewards. Maria Montessori, founder of the Montessori Method (1966) of teaching and Casa dei Bambini (Children's House), believed that educators should be concerned with "bringing them [children] liberty and independence

while interesting them in an activity through which they will discover reality...by which they may free themselves from the adult (Lillard, 1996, p. 93). Montessori (1966, 1967, 1994, 1995) believed that in order for children to reach their full potential, adults need to allow children the freedom to explore and choose interesting work for themselves.

### Study Rationale

Maria Montessori's general philosophy of teaching is centered on intrinsic motivation (1966), that is, the concept of motivating students with the work itself and inspiring them with the wonders of the world. I believe an examination of the various types of motivation used in the Montessori classroom setting are warranted to examine both how children are motivated and how such motivation functions. There is an expectation that Montessori and traditional educators (i.e., public education system) teach the suggested curriculum and complete the suggested objectives throughout the year. Some students may not be interested in learning or completing work that they perceive is not meaningful or does not immediately apply to their everyday life (Montessori). Creative educators are usually able to find ways to motivate students to keep them on task and interested throughout their educational journey. My participation in this study as a previous Montessori educator, interested observer, and now a teacher in the traditional classroom has caused me to reflect and determine if there are ways in which Montessori educators motivate, inspire, and reach the children of today that may be substantially different from teachers in a conventional classroom.

An examination of the ways the Montessori educators motivate children will determine whether or not intrinsic or extrinsic rewards are being implemented in these participants' Montessori classrooms. A further discussion of the traditional school setting may indicate critical differences and similarities between the two learning environments, that

is, Montessori and traditional. Why are extrinsic rewards used in a classroom setting? Systems of extrinsic rewards are commonly put in place to motivate children and keep them on task, but do they also have another effect? How do the various types of motivators impact the work ethic and behavior of children? In this thesis I will explore if and why these Montessori educators utilize intrinsic and or extrinsic rewards and, if so, what type of rewards are used and why?

### Statement of the Problem

Why do rewards sometimes seem to be required to stimulate work, and why are rewards not always necessary? Some of the reasons given by scholars (Artiles & Clark, 2000; Brophy, 1998; Citino, 1998; Covington, 2000, Kohn, 1993; Perricone, 2005) suggest that the need for rewards includes: student boredom, the educator may not describe the work as being important, and students may not understand what role this type of work will play in their future lives. The option of offering choice in the classroom and freedom within certain parameters is one suggested method to keep children on task (Hargrove, 2005; Kohn, 1995; Lepper, Greene & Nisbett, 1973; McCoach & Siegle, 2005; Newby, 1991). Classroom and student freedom is commonly guided by the educator within certain parameters as s/he oversees what the children are working on and intervenes if s/he believes the children are off task and/or are not working to their full potential. Is this freedom, within certain boundaries, a method that Montessori teachers use as management tool? Do rewards take away from the task at hand, or do they encourage a child to stay on task (Cameron & Pierce, 1994; Fabes, 1986; Newby)? Further, what types of rewards are used?

In order to address the issue of rewards and motivation in the Montessori classroom, I investigated what type of rewards are utilized (extrinsic and intrinsic) and what effect these

appeared to have on the level of student motivation. I also explored why educators felt the need, if so, to initiate any extrinsic reward strategies.

### Organization of This Study

In Chapter One I outlined the rationale, purpose, key question for the study. Chapter Two contains a discussion of the literature pertinent to motivation and rewards system in a Montessori classroom and a brief comparison to the traditional school system. I also weave my perceptions as a Montessori teacher into the literature review. Chapter Three describes the methodology and method of my research and my own relationship to the study. In Chapter Four I interpret the data and the themes as derived from my interviews. In Chapter Five I summarize my findings and examine how they relate to the Montessori classroom and intrinsic/extrinsic motivational strategies.

### Definitions of Terms

The following is a listing of terms and my understanding of them for the purposes of my study.

AMI is defined as the Association Montessori Internationale and is a training center for Montessori educators. The Association Montessori Internationale was founded in 1929 by Dr. Maria Montessori (Glossary of Terms TMTTI, 2000).

Casa dei Bambini is the term that refers to the “Children’s House” that is a classroom or house for children aged 2.5 - 5 years of age. The material is hands on, and sections of the classroom are divided into practical life, mathematics, language, sensorial, and culture. The

focus in the Casa classroom is to foster independence in the child, which is achieved by preparing the classroom environment with attractive, self-correcting materials (Montessori, 1966).

Cosmic Plan is a concept used throughout the entire Montessori system and is the foundation of Maria Montessori's system of education. She argues that all aspects of education are connected and related to one another that cosmically or globally, and this connection must be provided for the child in order for him/her to be successful. The goal is to develop within the child a global vision (Glossary of Terms TMTTI, 2000).

Elementary Montessori teacher is one who determines classroom rules and provides opportunities for children to exhibit self-control. A trained Montessori teacher is expected to be calm and withdraws her/himself from the limelight of the classroom in order to allow children's cognitive abilities to develop and their independence to unfold (Montessori, 1995). The Montessori teacher is not to mold the child to what she expects of him/her but to provide educational opportunities for freedom and independence to evolve (Classroom notes TMTTI, 2000).

Extrinsic motivation occurs when a student completes a task for a prize or external reward that will be given at the completion of the task. The thinking is that the student will get something outside and away from self-satisfaction if s/he completes this task (Kohn, 1993).

Intrinsic motivation refers to the completion of a task for the pure enjoyment and satisfaction of doing so. There is no extra incentive given or extrinsic reward, such as



stickers, given at the end of the task. The drive comes from within the person, and the task is completed to satisfy one's own curiosity (Kohn, 1993).

Lower Elementary is the term used to define grades 1-3. In a traditional Montessori classroom the three grades are grouped together. This grouping allows younger and older students to work together and to learn from one another. There is a ratio already determined, students to teacher, and if the numbers, exceeds the designated numbers the classrooms are immediately grouped by one grade (Lillard, 1996).

Maria Montessori established the first Casa dei Bambini or Children's House, in Rome, in 1907.

Montessori material is material specifically designed to allow children to visually conceptualize the principle which is being taught. Materials are prepared by the teacher and are displayed on a shelf (Montessori, 1967).

Motivation refers to an enticement to encourage someone to do something or to act a certain way (Webster's New World Dictionary and Thesaurus, 1996).

Overjustification effect is the effect that giving someone an incentive to do something that they already enjoy doing decreases their intrinsic motivation to do it (Wikipedia, Online Encyclopedia).

TMTTI refers to Toronto Montessori Teacher Training Institute, which is a training center for Montessori educators. This institution was the first Canadian training center for Montessori instruction established, in 1971.

## **CHAPTER 2: LITTERATURE REVIEW**

The desire to control classroom behavior has long been an issue (Coloroso, 1999; Kohn, 1993; Montessori, 1967, 1995). In 1898 psychologist Edward Thorndike analyzed the Law of Effect and how individuals behave when a reward is given. In 1911, Frederick W. Taylor's book *The Principles of Scientific Management* described factory work and how it could be divided into separate areas. Each worker would be responsible for a particular task and was reimbursed with money if he/she met the required quota. The incentive to receive money once a task is complete relates to the concept of extrinsic motivation in the classroom environment. When children are informed that there will be a prize given to those who finish the task, educators anticipate that children will be motivated by the extrinsic prize and work towards that reward goal, as opposed to intrinsic motivation that is concerned with the "students' own inner willingness to persist in solving the problem" (Grabowski & Song, 2006, p. 445).

### **The Classroom Environment Stimulates Motivation**

According to Brophy (1998) "intrinsic motivational strategies apply when students value (or learn to value) participation in the activity itself" (p. 126). It is commonly the role of the educator to provide children with work that they will find rewarding. Then children are eager to work and complete the task on their own without the need for an extrinsic reward or a tangible incentive. Work is accomplished by giving students choice and freedom within their environment (Ginsberg & Wlodkowski, 2000; Hargrove, 2005; Kohn, 1993, 1999; Lepper, Greene & Nisbett, 1973; McCoach & Siegle, 2005; Montessori, 1995; Newby, 1991). For example, if children are expected to complete a book report and follow a series of questions provided by the teacher, an

educator can allow students to choose which book to study. The freedom to choose encourages a child who is not interested in completing the book report to be intrinsically motivated to study the author of his/her choice. If the child continues to be uninterested in the assignment, the Montessori educator may ask the child to find and present an alternative assignment he/she can complete instead of the book report. Montessori (1967) argues that such freedom in the classroom heightens a child's own intrinsic motivation to complete work, which in turn allows her/him to grow and become an independent thinker/worker. Intrinsic motivation is encouraged by having a system of education that freely allows children to work on any desired task at any time. Intrinsic motivation is "cognitively more effective than extrinsic motivation for problem solving, persevering in creative tasks and avoiding behavior that makes it necessary to cram for tests later" (Ginsberg & Wlodkowski, p. 91).

Classroom environment is a key element relating how children respond to their work (Newby, 1991). Newby discusses the teaching styles of three traditional fifth grade teachers and how children in these classrooms reacted to work and their environment. The teacher, who provided an environment fostering intrinsic motivation, demonstrated that children asked for even more work and remained on task longer in comparison to children who were presented with extrinsic motivators. The use of verbal praise and tangible rewards was documented during each visit, and the children were closely observed to determine whether or not they were on task. Newby's study indicated that educators who taught their children and "related lessons to students' interests had less need to refocus their attention as compared with those who were not using such a strategy" ( p. 7). He also noted that classrooms that had high levels of intrinsic motivation

and punishments, such as taking recess away or isolating the child and having him/her work alone, assisted in keeping children on task. First-year teachers tended to lean more in the direction of extrinsic motivation and punishments of consequence to motivate children (Newby). The punishments ranged from detention, recess taken away, and working alone in a corner of a classroom. Newby concluded that more research needs to be done to analyze teachers' thinking, attitudes, and strategies from various teaching experiences. As described by Ginsberg and Wlodkoski (2000), intrinsic motivation occurs when "they [students] feel wise, capable, creative, joyful. These are the emotions of intrinsic motivation. This is what educators want all students to experience as they learn" (p. 91).

Citino (1998) discussed a study done by Newby (1991) with fifth grade students, developed in a classroom that inspired intrinsic motivation. The classroom had more students on task and fewer children misbehaving in comparison to classrooms of students receiving extrinsic motivating rewards. McCoach and Siegel (2005) discuss how the environment in which students are placed can have an effect on their internal drive and therefore their level of intrinsic motivation. The classroom must be "friendly and likely to provide positive outcomes" (p. 25) from educators and their student peers. Research over the past decade has consistently concluded that children "will fare better if they are taught how to recognize the natural consequences and rewards of their actions" (p. 4). Children learn to work at a level that they believe is their best and are not suffocated by extrinsic motivation to perform at artificially higher levels. Mendler (2000) outlines six key points that educators can utilize to motivate students:

1. All students are capable of learning when they have the academic and personal

tools to be successful.

2. Students are inherently motivated to learn but learn to be unmotivated when they repeatedly fail.
3. Learning requires risk taking, so classrooms need to be safe places physically and psychologically.
4. All students have basic needs to belong, to be competent, and to influence what happens to them. Motivation to learn most often occurs when these basic needs are met.
5. High self-esteem should not be a goal, but rather a result that comes with the mastery of challenging tasks.
6. High motivation for learning in schools most often occurs when adults treat students with respect and dignity. (p. 7)

In my view educators should strive to provide students with the necessary academic and personal tools to reduce or eliminate failures. Students will not have opportunities to succeed if we do not equip them with what they require to be successful. When an educator realizes that students are failing or indications are that students are not succeeding, it is the educator's task to find another strategy to reteach the lesson or to reintroduce the concept. The classroom should be an environment where students feel safe and are not afraid to try something new or to make mistakes. The teacher as facilitator is there to guide the students and encourage them to explore and succeed in every way possible.

### **Negative Impact of External Motivation**

Scholars have argued that children should not be rewarded extrinsically; stickers, grades, or pizza as the tangible prize takes away the importance of the work (Artiles & Clark, 2000; Covington, 2000, Ginsberg & Wlodkowski, 2000; Kohn, 1993, 1999; Perricone, 2005). Kohn (1993) explains that many educators are “surprised to learn that rewards kill interest” (p. 71). He explains how many people assume that if you add a reward or extrinsic motivating factor to do work, a child will be more interested and strive harder to complete the goal. One inherent problem with this concept is that the child is not working towards completing the task but to achieve the tangible reward, not for personal fulfillment or the love of the work (Kohn, 1993). Kohn’s concern, suggesting that extrinsic rewards just motivate students “to get rewards. They do not motivate children to learn” (p. 64). Kohn (1993) describes how, “anything presented as a prerequisite for something else - that is a means toward some other end - comes to seem as less desirable” (p. 76). Artiles and Clark (2000) argue that the use of an extrinsic reward not only diminishes the quality of the work but sends a mixed message to children that they may be incompetent. Children may begin to question whether educators also find the task boring and conclude that we are offering them an incentive solely to keep them task oriented. We may then pose the question, how can we keep children interested in tasks that they do not care to complete? Is there harm in providing children with extrinsic incentives to keep them on task and to fulfill the requirements? Kohn (1993) explains in great detail how the reward lessens the initial creativity of a child, and if a child is not already interested in the task the chances of her/him completing adequate

grade level work which requires great inner intrinsic motivation becomes even more remote. Kohn (1993) concluded,

The use of powerful systematic reward procedures to promote increased engagement in target activities may also produce concomitant decreases in task engagement, in situations where neither tangible nor social extrinsic rewards are perceived to be available. (p. 39)

Kohn (1999) clearly believes that “it is not that extrinsic motivation is different or inferior; it’s that it is corrosive: it tends to undermine intrinsic motivation” (p. 98).

Perhaps the reward is taking away from the importance of the activity and children come to value the prize more than the work.

### **The Need for Freedom**

Brandt (1995) underscores Kohn’s feelings pertinent to the offering of extrinsic rewards in the classroom, contending that children should be free in a learning and caring classroom. Freedom is without extrinsic strategies. Freedom follows the philosophy and methodology of Montessori described in detail in the book *The Absorbent Mind* (Montessori, 1995). Kohn explains that extrinsic rewards are ways of treating children like pets. In lieu of engaging the children by treats and rewards, Kohn challenges us instead to look at curriculum and “see how it can be made more engaging” (Brandt, p .2). Kohn has examined over 70 studies that use extrinsic motivation, and he argues that they are not “ineffective” but take away from essential instruments that should motivate and drive a child, that is “the desire to learn and the commitment to good values” (Brandt, p.2). Kohn suggests that educators provide children with a motivating curriculum, a caring environment, and not to confuse the term motivation with the term compliance.

### **The Three Cs**

Kohn (1993) argues that a traditional classroom can run smoothly without the need for external rewards by implementing ideas of control, community, and choice. The effective implementation of the three Cs (control, community, and choice) could reduce the need for tangible rewards. Students learn how to control their impulses and behave properly in the classroom using their inside voices, tucking in their chairs, and putting their work away. A sense of community in the classroom provides students with a sense of comfort in that each person in the room is looking out for the best interests of another. Choice is given to students once educators establish control, and students are given the freedom to work with whom they choose and to decide which task they would like to do. The content of the curriculum is generally prescriptive, but educators have options to pursue co-operative learning in groups, think/pair/share, or teamwork to foster and develop meaningful learning experiences. Students may be introduced to word webs and dioramas in lieu of the standard paper/pencil tasks. Hargrove (2005) discusses the notion of choice. A second grade traditional teacher she interviewed believes that it is the role of the teacher to provide a child with “positive learning environments where experimentation may be allowed and encouraged. We must get outside the box” (p. 39). Choice adds to the lesson and allows children the freedom to choose what type of work interests them and motivates them internally. The advantages of choosing their own work enhances feelings of independence and self-worth. The teacher trusts the students to make wise choices, and students in turn may feel increased self-respect and independence.



The idea of providing a safe learning community for students encourages educators to provide an atmosphere that promotes and nurtures feelings of being welcomed, comfortable, and safe. The perception of being protected or safe in an environment that encourages learning can help students to remain focused on completing tasks. It appears to me that choice, such as who to work with or sit beside, is important, and educators are striving to provide these options effectively. Students decide for themselves whether or not they want to work in groups, and this ability to choose affords students the opportunity to “learn social skills as well as cognitive skills” (Chapman & Gregory, 2002, p. 74). In a Montessori setting, the element of choice is perceived to be an important and positive component that encourages and promotes learning during the developmental and later years. McCoach and Siegle (2005; see also Ginsberg & Wlodkowski, 2000) agree that choice is a key motivator, and allowing students to choose a particular research project topic will increase interest and students may be more eager to begin the assignment. If the topic is generally of interest to students, it is a subject that they will probably want to explore further.

Ginsberg and Wlodkowski (2000) outline four effective strategies to increase the level of intrinsic motivation in the classroom. They explain and define the four conditions of the motivational framework: inclusion, positive attitude, challenging and engaging learning, and engendering competences;

1. Establishing inclusion refers to....practices that contribute to a learning environment in which students and teachers felt respected by and connected to one another.

2. Developing a positive attitude refers to....practices that contribute to, through personal and cultural relevance and through choice, a favorable disposition towards learning.
  3. Enhancing meaning refers to bringing about challenging and engaging learning.
  4. Engendering competence refers to....practices that help students authentically identify that they are effectively learning something that they value. (p.45)
- Kohn (1993), Hargrove (2005), Montessori (1995), and McCoach and Siegle (2005) promote these same competencies. These four competencies clearly outline strategies that will heighten and develop student motivation by introducing grace and courtesy while encouraging students to respect both one another as well as the educator in a classroom. Such a respectful practice fosters a sense of belonging. Through the expression of free choice children can grow and develop into critical thinkers and lifelong learners. The idea of challenging students and making learning authentic should be sufficient to motivate them intrinsically and to keep them on task.

### **Put the Carrot Away**

Covington (2000) argues that extrinsic motivation in any school setting does not benefit children. He argues cogently that extrinsic rewards not only interfere with the learning process but also decrease the appreciation the child has for the lesson itself. On the other hand intrinsic motivation occurs when the child has realized the “benefits of personal growth or enhanced well-being” (Covington, p. 23). Covington also discusses the issue of grades and how students are “aroused for the wrong reasons to win over

others and to avoid losing and these reasons eventually lead to failure and resentment” (p.23). The grade becomes the reward and the children come to believe they are worthy because of the grade, not because of the effort.

As an educator, I realize it is an uphill battle regarding the dispensing of grades as parents and even students want them. I feel it is my duty to impart to the children that the learning process and striving toward the desired “A” is all part of the educational journey. Some students are results oriented, and they dismiss the journey they must follow in order to get there. The Covington report discusses how children are influenced in different ways and some work towards the “A” because they believe it proves how intelligent, worthy, and successful they are. When children work towards a grade goal that is not reached, they may begin to develop “feelings of hopelessness about ever succeeding, feelings that bode ill for both the goal of appreciation and the goal of achievement” (Covington, 2000, p. 24). Ferguson (2004) believes that grades are given in the majority of schools because teachers are responding to the demands of society “despite warnings from academics, teachers and parents about how they [the grades] can affect their [student] motivation” (p. 34). There are other methods that can be implemented when evaluating a child’s progress and learning, but it is difficult for teachers to fight the demands that are placed upon them to grade students ( Anderson & Minstrell, 2002). In the traditional education system, “teachers are expected to teach the mandated curriculum whether or not they agree with it” (Anderson & Minstrell, p. 2) and evaluate students according to the objectives that are mandated by the Ministry of Education.

According to K. Dotson (1998) grades “do not accurately represent the intelligence or ability of an individual student because they do not address a student’s potential for success later in life” (p. 3). Grades may not be an accurate reflection of a child’s emotional intelligence, creativity or memory. If, at the time a test was administered, the child was having an off day, the test does not take that into consideration, and the child is perhaps penalized with a lower score. This then is not an accurate reflection of the child’s capabilities. Ferguson (2004) also adds that a student’s personal interest in the subject matter will also be reflected in the grade the child receives. Ferguson emphasizes that school should be structured around the interests of the children. Children should be working towards a goal and not focusing all of their energy on falling short as a person but rather “falling short of a goal” (Covington, 2000, p. 25). Students need to strive to enjoy the learning and not just equate the grade with their level of success. McCoach and Siegle share the same educational beliefs as Covington and state that in order for a child to complete a task with gusto s/he must be motivated and be intrigued by the nature of the work itself. McCoach and Siegle describe motivated children as those individuals who “believe what they are doing will produce beneficial outcomes...have the skills to be successful...trust their environment and expect they can succeed in it” (p. 22). McCoach and Siegle believe that all three of these components: (a) child’s personal interest in school, (b) schools should be structured around the needs of the child, (c) enjoyed learning, will result in less behavior problems and will encourage the setting of realistic goals.

Perricone (2005) concludes that if the goal is clear in the child’s mind and s/he is aware of what significance the work will have on his/her life, s/he will be motivated to

work on the task and give it a good effort. He explains that if his students ask him what they will get out of the lesson, an A+ or a pizza party, he simply answers, “What do you get? You get smarter” (p. 64).

### **Behave Yourself**

Citino (1998) explains the effects of extrinsic rewards and punishments on behavior and learning. Teachers may use extrinsic rewards and punishments as a means to help manage misbehaving students in the classroom and to keep 30 or so children under control. Punishment is seen as a “viable solution in which students are forced into desirable behavior, e.g. studying, doing homework, ...behaving in class” ( p. 1). She discusses how the extrinsic reward becomes more inviting than the task itself. Children work within the parameters of the extrinsic reward, as long as it is being offered. She argues that eventually when there is no tangible reward, there may also be minimal learning. Citino discusses how teachers in the past used corporal punishment to keep children under control, which was meant to create a “cooperative and submissive” (p. 2) child. Citino studied the short-term and long-term effects of extrinsic rewards and describes them as a method of behavior modification. These extrinsic rewards do not relate to the subject matter and serve only as an external drive to motivate children to avoid external punishment. Woodward (1996) points out that when an educator notices that students are on task and are behaving, an educator ought to “reward it immediately, you will not only be giving the attention they need and deserve, but you will also be encouraging the behavior you want to see continue” (p. 49). The reward does not have to be a candy or sticker but could be a comment regarding their work ethic and that the educator is proud of the students. The message is that you are proud of their behavior and

want to encourage the students to continue. Woodward does explain that the reward “doesn’t necessarily have to be handing out M&M’s every time they raise their hands... but a quick smile, a sincere compliment” (p. 49), will go a long way. Citino also agrees that the need of an extrinsic reward sends the message to the children that the task must not be worth completion on its own and therefore an external reward is necessary to keep the children interested and motivated. Children need to learn that “there is some educational, moral and character development value”(p. 4) in completing assignments and work in the classroom setting for the sheer intrinsic satisfaction it gives. The intrinsic reward cannot be removed from the classroom or taken away like recess or gym time; it is a learned goal within each child (Citino).

#### **Advantages and Disadvantages of Intrinsic and Extrinsic Rewards**

Lepper, Greene and Nisbett (1973) analyzed a field experiment conducted with groups of students who received extrinsic motivation and those who did not and what kind of effect extrinsic motivation had on their work. “Overjustification” hypothesis means that an individual’s “intrinsic interest in an activity may be undermined by inducing him to engage in that activity as an explicit means to some extrinsic goal” (p. 130). The student is working for the wrong reasons, not for the joy and love of learning but to achieve the extrinsic reward at the end of the work. Consider this example. Nursery school children were observed in a classroom setting to determine their initial interest in a drawing activity that was set up at a back table. The researchers observed the children and recorded how often the children drew or picked up the markers at the table. The children who were most engaged in the activity were the subjects chosen for the second experiment.

The second experiment studied one group of children who were working to receive a certificate with a gold star and red ribbon once they completed their drawing; a second group had no recognition that they would receive a certificate similar to the first group once the drawing was completed. A third group worked to complete the drawing and no reward was given. The experiment suggested that children, at least in this instance, expecting the extrinsic reward spent less time with the work than did the children in the other two scenarios. Children in the unexpected extrinsic reward setting demonstrated no change or an accelerated interest in the task than the intrinsic reward setting. Lepper et al. (1973) suggest that similar observations will occur frequently in the classroom setting, and not respecting the spontaneity of students is a problem in the educational system and “the schooling process seems to almost undermine children’s spontaneous interest in the process of learning itself” (Lepper et al., p.136). Lepper et al. also agree that children do not necessarily lose intrinsic motivation because a reward is given at the end of the task. At times extrinsic motivating factors “can be used to effectively increase interest in certain broad classes of activities” (p. 136). The extrinsic reward, such as a candy or a free homework pass, might encourage the students to complete the work in order to receive the prize. Perhaps if there were no extrinsic reward, the students might not have the urge to complete the drill sheets or handouts. They suggest that extrinsic factors motivate children in a low-interest activity or when an activity becomes interesting only once it has been engaged in for a long period of time. They suggest avoiding “unnecessary” use of extrinsic, tangible rewards to inspire or motivate a child.

### **Tales from My Montessori Experience**

As a Montessori teacher, I observed first hand the lack of initiative in students and non completion of work in my daily teachings and resorted to rewards, such as marble parties, extra time added to recess, and no-talking challenges to keep the students on task. The added extrinsic rewards kept the students focused and kept their behavior under control. I noticed however, as I gained more experience in the classroom, that I had to provide work for the students that was inspirational and that touched upon their interests. If the students had an appreciation for sports, I searched for reading material that was linked to this topic. The extra time I took to find meaningful work resulted in students staying on task and absorbing information like sponges. The discipline problems were my issue, as I had not learned how to deal with each child individually, and once I found strategies to encourage appropriate behaviour, more effective results were attained.

### **Reinforcements and Rewards**

Cameron and Pierce (1994) studied effects of reinforcements/rewards on the intrinsic motivation of children. Ninety-six studies were conducted to evaluate individuals receiving extrinsic rewards compared to individuals experiencing intrinsic rewards and the degree that the extrinsic reward effects intrinsic motivation. They discussed in detail how researchers have sought to prove that extrinsic motivators ultimately have a “detrimental effect” (Cameron & Pierce, p. 363) on children and learning. It was apparent that there are those who are against extrinsic rewards, for example Lepper et al., (1973), Kohn (1993), Sutherland (1993), and others who are in favour of extrinsic rewards, for example, Hopkins and Mawhinney (1992).



One of the first laboratory investigations examining intrinsic and extrinsic motivation was conducted by Deci (1971) with 24 college students. It comprised a 1-hour session over a 3 day period. Through his findings, Deci advocated “groundbreaking evidence for the negative effects [of extrinsic rewards] on intrinsic motivation” (Cameron & Pierce, p.365). Deci then performed another test using verbal praise rather than a tangible reward and noted a significant difference in the group that received the verbal praise. The students were engaged and intrinsically motivated to complete the presented task.

Deci continued to compare the findings from various researchers, comparing the pros and cons of intrinsic motivation and extrinsic rewards. Two reward systems were studied, verbal motivation and tangible rewards, and both had positive and negative effects. The use of verbal praise appears to heighten the level of “intrinsic motivation; [whereas] tangible rewards produce no effect when they are delivered unexpectedly, and they are not detrimental when they are expected” (Cameron & Pierce, 1994, p. 394). Their research results explored how extrinsic rewards and the overjustification effect can be seen as crushing intrinsic motivation and drive in the students. As defined by Wikipedia, the overjustification effect “is the effect whereby giving someone an incentive (monetary or otherwise) to do something that they already enjoy doing decreases their intrinsic motivation to do it” (Wikipedia, Online Resource).

Cameron and Pierce (1994) conducted a meta-analysis on previous traditional classroom research to investigate whether or not extrinsic rewards and reinforcements cause a substantial decrease in intrinsic motivation. The amount of time that the participants spent on tasks was compared with the no reward and extrinsic reward

settings. The rewards/reinforcements were tangible items, and praise was also analyzed. However, according to the data in the article, “only a handful of studies have been conducted using this type of design”(p. 369). Their findings indicated “rewarded people are not less willing to work on activities and they do not display a less favorable attitude toward tasks than people who do not receive rewards” (Cameron & Pierce, p. 395). The extrinsic rewards work as an incentive to keep people on task and interested. Their results did indicate however that those who received verbal recognition had increased intrinsic motivation. The use of stickers, certificates, and candy produced no effect when they were offered to the children at the end of the task if they had no prior knowledge of receiving a tangible gift. The tangible objects at the end of the session did “not lead to a decrease in intrinsic motivation under any conditions” (Cameron & Pierce, p. 395). Their meta-analysis concluded, however, that intrinsic motivation decreased when subjects were aware of a tangible prize prior to the beginning of the task. The overall findings from the report emphasized that positive feedback and verbal praise increase the students’ intrinsic level of motivation. The research also emphasized that extrinsic rewards can have a negative impact on an individual when being used in an activity without giving “regard to the standard of the performance” (Cameron & Pierce, p.398).

### **Tales from My Montessori Experience**

I have witnessed situations when students are working and are on task completing an assignment and there is no need to introduce an extrinsic reward. Once the adult informs the students’ that an extrinsic reward will be granted, this information has the potential of modifying the students motivation to complete the work. The students can

change their focus from the work they were doing to rushing to complete the task to receive the extrinsic reward.

McCoach and Siegle (2005) claim that praising a child for a specific accomplishment is better than a compliment. The specific feedback affords the child an opportunity to realize two things: “a) what specific skill they possess and b) that they developed it” (p. 25).

I have seen the smiles on my students’ faces when I have praised them verbally and individually for a job well done. Students seem appreciative when we take the time to comment on a particular project or point that they raised in class. The praise is a mild form of extrinsic reward. The few seconds that it takes to tell a child that they did something well perhaps reemphasizes what they already know or reassures those who may have insecurities. I truly do believe that students have insight regarding when a compliment is not genuine or when it is said very casually in passing. Compliments can be overdone and overused, and I pay particular attention to this, as I feel I might have misunderstood this application in my first few years of teaching. At times children need to understand that when compliments are not forthcoming, perhaps they don’t deserve them.

### **Building Blocks and Rubber Toys**

Conducting a study of 56 preschool children, Fabes (1986) examined “the consequences of rewards and the contexts in which they are used on children’s task interest” (p. 1). He analyzed data acquired from an activity that included extrinsic rewards; restrictions (certain coloured blocks) during an activity with extrinsic rewards given at the end of the activity, and restrictions (certain coloured blocks) in an activity

with no extrinsic reward given at the end of the activity. He hoped to determine how the removal of extrinsic rewards would affect the intrinsic interest and motivation within a child to work more deeply with the material once the award/restrictions were taken away. The children were told they would receive a rubber toy at the end of the building period if they did the building correctly, using only the larger blocks. The children in this study were presented with building blocks as well as the parameters for their utilization. The task-contingent group was told at the end of the manipulation they could reach into a paper bag full of rubber toys and pick one. The third group were told to use the large blocks only, and no reward was given at the time of completion. Once the experiment was completed the children were brought into another room and asked to wait for 5 minutes. The children sat at a table with the blocks used in the previous experiment and were given free time to play with them as they waited for their instructor. The researchers observed the children to see if they would engage in the activity during free time. The researcher concluded how the activity with no reward affected the internal drive to pursue an activity during free time. Fabes, concluded that “rewards may undermine the intrinsic interest by heightening the salience of the restrictive context” (p. 5). The rewards are used as tools to motivate students, and this use in turn reduces interest in the task and children ultimately just work towards the tangible reward. The experiment conducted is different from previous experiments discussed, as children are not asked to draw a picture any way they want, but are told to build a tower and are allowed to use only certain blocks. The group of children during the free choice period spent more time working with the blocks than did the children who were rewarded for initially using the blocks. These data appear to reemphasize the point that extrinsic rewards “undermine task interest” (Fabes, p.11).

Children who were given no extrinsic rewards initially did not spend as much time on the activity, but in the end, during free choice, they worked with the material the longest.

A second experiment (Fabes, 1986) was conducted in a no reward permissive setting (the children were allowed to use all of the blocks in the room) and a no reward in a restrictive setting (the children were allowed to use only the big blocks in the room and not the small blocks). A third group was rewarded in a permissive setting where they were allowed to use all the blocks, with a toy reward, and the fourth group was rewarded with a toy in a restrictive setting. Children in the permissive free time group spent more time building with the blocks than the children in the restrictive group. Only 2 children in the restrictive/reward condition engaged in building with the blocks during the free choice period. The results of this experiment suggest that for children in the restrictive/reward environment, the extrinsic reward (the toy) had a detrimental effect on their intrinsic motivation and work with the blocks during their free time. The children who were to receive a toy did not have the motivation to work with the blocks in their free time, as there was not an extrinsic reward at the end of the task. The children in the permissive reward setting were not affected by the reward, and the children in the restrictive/nonreward setting also demonstrated higher interest in the material during free time. The results clearly illustrated that “rewards may heighten the salience of the restrictive....properties of the experimental context and that this may result in lowered interest in the task” (Fabes, p. 16). The results also indicated that when external tangible motivators are introduced to an activity, the children work for the tangible reward and not necessarily for the pure joy of playing with the blocks. The “challenge is how to impose such controls without undermining children’s feelings of self-determination” (Fabes, p.

17). It might be useful to discover how parents and teachers can assist children without producing negative effects through the improper use of control agents. In summation, extrinsic rewards must be manipulated and used in a manner that does not take away from the learning experience or limit opportunities for the children to develop the love of learning.

Cameron and Pierce (1994) thoroughly examined the results of 96 experiments and concluded that there are positive and negative factors in the use of extrinsic motivation, depending upon how they are implemented. More research is needed to determine under what circumstances extrinsic rewards are considered as a bribe. Cameron and Pierce suggest, “promises linked to contingent reward may function as bribes rather than as positive incentives” (p. 397). The research conducted in the experiments just described was controlled, thus perhaps difficult to imagine occurring in a working environment. More research needs to be conducted in real classroom settings, in the real world, in day-to-day situations. Further research might suggest what encourages or inspires the male to work and what inspires or drives the female. Another area of investigation might be to understand how children feel when praised. Researchers need to consider how children react to praise and how praise is perceived by students. Children who thrive to excel and accomplish As may have difficulty in accepting low praise. What kind of effect might this have on their personal development? When does praise suggest pride and/or shame? What are the boundaries? How does praise shape values and encourage the children to move forward without having a negative effect on their character? These are all questions that further research may address.

There is a common theme in these articles. It seems quite evident from the literature that verbal praise, a type of extrinsic reward as a motivating factor, does not have or seem to have a detrimental effect on children. Praise motivates children to do well and inspires them to move forward without the use of tangible motivation as the end result. Scholars such as Kohn and Montessori suggest that children who work towards tangible extrinsic rewards will put just enough effort into a project or assignment in order to acquire the tangible prize. The students who have no inkling that they will receive a prize at the end of the task put more effort into the assignment than the child who is told prior to beginning that completing the assignment will result in a tangible reward (Cameron & Pierce, 1994, p. 397). From the data, we may conclude that praise does not have as detrimental an effect on children as does the use of tangible, extrinsic rewards (Cameron & Pierce, 1994, p. 397).

Cameron and Pierce(1994), Fabes (1986), and Lepper et al. (1973) summarize the pros and the cons of intrinsic motivation and extrinsic rewards: how to motivate children, how adults use extrinsic motivation as a means to control children, and how to have children behave the way the adult is expecting. There are occasions where extrinsic rewards are used as motivating tools, and in those instances children are apparently motivated to do the work in order to achieve the extrinsic prizes at the end of the assignment. Extrinsic motivation and bribes are used to motivate children to complete assignments or behave in an expected manner.

### **Preparation is Key**

There are some subtle and not so subtle differences between the Montessori classroom and the traditional one. The Montessori classroom is a place that a Montessori

educator prepares with great pride and keeps the needs of the students in mind at all times. Montessori teachers are generally given the last week of school to prepare the classroom for the new teaching year and a few days before the school year begins to make additional adjustments or changes. The materials in a Montessori classroom are made or are ordered through specific companies that tailor the activities to meet the criteria of the Montessori classroom (Montessori, 1995). Traditional school teachers work until the end of June and are not given any additional days to prepare; they must use their own time. This time factor is one of the differences between the two systems. The majority of the materials found on the shelf of a Montessori classroom are handmade and are placed in colour-coded boxes in thematic sections of the classroom. For example, if there are classification cards on the parts of the tree, they would normally be placed on a green tray or in a green box in the nature section part of the class. Maria Montessori believed that the role of the teacher was to “prepare and arrange a series of motives for cultural activity in a special environment made for the child” (Montessori, p.8). The sections in the classroom are divided by shelves, and each subject is colour-coded. There are rugs placed in various corners of the room to facilitate lessons and to allow the students to work with the classification cards and material. In the traditional setting you might find similar boxes and work areas prepared by the educator, but the material does not follow the curriculum of the Montessori environment. Montessori stressed that in order to be a successful teacher, one of the most important duties is “to watch over the environment, and this takes precedence over all the rest”(p. 277). The educator is continuously watching over the students and taking anecdotal notes of the learning that is taking place and of the behaviour of the students. The Montessori environment is what



captures the students, and the “influence is indirect, but unless it is well done there will be no effective and permanent results, physical, intellectual or spiritual” (Montessori, p. 278). As suggested by Tepper-Rasmussen (2004), the prepared environment touches upon the “child, the adult and the physical environment” (p. 29). The Montessori teacher must prepare in advance to work with all three aspects of the prepared environment.

In a study of the Montessori environment done by Cossentino (2005), the author compares the environment of the traditional school to that of Montessori. Cossentino discusses that in a Montessori environment the Montessori teacher focuses on the student, the environment (work), and the educator’s relationship with the child.

A Montessori teacher interacts with the environment by preparing it. A Montessori

student interacts with his environment by working with the materials as prepared by the teacher. And the teacher interacts with the student by first inviting him to work with the materials she has prepared, then protecting his concentration once he has engaged in work. (p. 224)

The Montessori classroom is prepared in advance to meet the needs of the students, in order to prepare the material for specific themes/topics and to ensure the educator is prepared. Cossentino elaborates that in the traditional setting it is the student, teacher and work (p. 223), whereas in the Montessori setting preparation of the classroom is a crucial component and is believed to help ensure students’ success.

### **The Role of the Teacher**

The teacher in any school setting plays one of the most vital roles in the classroom. Educators in both systems are taught how to prepare lessons, timetables, meet

the needs of the various learners in the classroom, complete report cards, and create opportunities for the children to work collaboratively in groups. The role of the Montessori teacher is clearly defined, and several days are spent throughout the 10-month training discussing how to be an effective leader, role model, and a member of the community. The primary role of the Montessori teacher is to provide “freedom, discipline, independence, and normalization” (Malm, 2004, p. 403). As suggested by Malm, Montessori teachers believe their role to be one that “includes...seeing each child, assisting the child’s motivation to learn and being humble and accommodating” (p. 404). The educator “must believe in the uniqueness of each child and his capacity for auto-education” (Tepper-Rasmussen, 2004, p. 29). Montessori teachers are commonly assigned to the same group of children over a 3 year period and play an important role in the students’ lives. As suggested by Lillard, this “responsibility requires that teachers work to develop their character and interests in continuing learning” (1996, p. 97). The 3 year cycle takes away the opportunity to be exposed to various types of teachers. Montessori teachings (1967) suggest that classrooms be grouped in three grade levels or splits 1-3 lower elementary and grades 4-6 upper elementary. Children are placed with the same educator over these 3 years. Montessori believed this was an advantage for both children and educator, as the educator could watch them grow and witness their development over a 3 year span. The lessons taught are “a blend of content that is appropriate to meet the goals of the society of which the child is a part” (Loeffler, 2004, p. 16). The role of the Montessori teacher “is not to mold the children after themselves; rather, they guide the children to freedom and independence” (Lillard, p. 89). In a study done by Malm, results clearly indicate that Montessori teachers have a “philosophical and

pedagogical awareness of what their professional role implies“ and have as a consequence ”genuine feelings of care and concern for their students based on freedom, respect and the holistic perspective”

(p. 411). The primary role of the traditional teacher is “to educate, to help the students to understand” (Gibson, 2005, p. 2). The curricula in the traditional system and Montessori are vast, and it appears that there is more content added to the curriculum, yet the amount of school days does not increase. The traditional school system also has teachers who teach children over 2 years if they are in a split class; otherwise children usually change their teachers yearly.

### **Classroom Layout**

The traditional classroom setting may have desks or tables aligned in a circular fashion, in a U shape, in straight rows, or grouped in pods. The arrangement of a classroom “is crucial to a successful classroom and reflects how the teacher wants to run the class” (Salas Tenorio, Walters & Weiss, 2004, p. 27). In a Montessori setting, desks are not used; rather the classroom is equipped with tables and the children store their binders and school supplies on a shelf. The environment “can assist and enhance students’ habits of work and co-operation, and these should be coupled with materials that support the child’s growing understanding of matching concepts and goals” (Loeffler, 2004, p. 16). Montessori children choose where they sit in a classroom and are given the freedom to work either with peers or alone. Children are given the freedom to work with whom they please and to work where they choose. As suggested by Lillard (1996), Montessori believed that children learn from their mistakes, and if they choose companions resulting in a negative working experience, they will learn from this

experience and choose new peers for the following work period or question why the last experience was unsuccessful. Once the students are “concentrating and working independently and without teacher interference, they have achieved the goal of self-direction” (Lillard, p. 93). Children learn “that it is not necessary to work with their closest friends” and “how to make wise choices in coworkers” (Lillard, p. 93). A Montessori teacher observes students working, and if a child is wasting his/her time the educator will speak to or redirected the student to a new area to work in the classroom. When children work together they can assist one another, learn from each other’s strengths, and learn to listen and respect others while they are speaking. The idea of having the students work together is meant to instill “meaningful co-operation rather than competition among peers” (Loeffler, p. 17). Students learn to work with one another and help others in need. The students have the choice to work independently or with peers. Montessori affords choice for the students, and they are never forced to work with others. The Montessori teacher is taught in training how to effectively teach this independent lesson to the students: the way in which a phrase is stated, “would you prefer to work with your friends or would you prefer to work alone?” Students are offered this choice only once the teacher believes they are ready. Loeffler suggests that classroom arrangement in a Montessori classroom affords children “possibilities that support both intellectual and emotional development” (p. 16). Students work at a level that meets both their cognitive development and their social and emotional development.

As described by Cossentino (2005), a non-Montessorian, the Montessori environment is organized with

carpeted spaces punctuated by low shelves containing meticulous trays of materials- to the manner in which students and teachers interact –minimal discourse, usually conducted in whispers-nothing was as it should be, at least not according to the classroom norms” (p.212)

that he was used to in the traditional classroom.

### **The Sound of Busy Bees**

There is a constant buzzing in a Montessori classroom that alludes to the children being busy at work. Because there are split grades in a Montessori setting and various learning needs, children are working on different tasks throughout the day. The educator prepares her/his schedule for the day and invites children to sit with her/him when she feels the timing is appropriate to present a new lesson. This practice may be similar to the traditional experience; however in the Montessori classroom the lesson may be presented to one child or to a few children. It is common practice for the teacher “to get two, three or more children working together to explore an area of interest following a story or presentation of material” (Lillard, 1996, p. 92). According to Lillard it is the role of the Montessori teacher to log each student’s progress and “makes certain that the children have the academic skills and general level of knowledge matching or surpassing those of their peers in the regular school system”(p. 92). The Montessori educator decides who to teach and which students should be taught together in a group based on their academic standing and progress. It is common that a 6 year-old could be included in a lesson with 8 year-old students; it all depends on the needs of that particular child and making sure that the educational requirements for that child are met in order for her/him to meet his/her full potential. In a traditional classroom the educator often teaches from the front of the

class to everyone (Jones, 2000, p. 11). The educator in a traditional school may circulate around the room while speaking, and the students are collectively working on the same assignment. Jones suggests that “effective teachers make an art form out of working the crowd” (p. 11), and this assists with classroom management issues and students working on task. An educator in a Montessori environment may also circulate around the room while speaking, but due to split classes and individual assignments, the students are commonly working on different assignments. There are also split classes in the traditional school setting, but the split in this instance is normally done to facilitate numbers. According to Bush (1991), the need for split classrooms is a solution due to number of students enrolled, the guidelines of the particular board and “economic feasibility” (p. 439).

Children in a Montessori school having a question may, walk over to the teacher (rather than remain seated with a raised hand), to touch the teacher without interrupting an ongoing conversation, and to wait until the teacher can conclude the ongoing conversation before being recognized. For outsiders the sight of a child (sometimes several children) attached to a teacher while waiting to be acknowledged can be perplexing. (Cossentino, 2005 p. 216)

The hand on the shoulder is one of Montessori’s methods that keeps the classroom running smoothly and the children moving freely without disrupting others with their voices. As suggested by Cossentino, the mere gesture of children placing their hands on the educator’s shoulders instills many lessons: patience, human contact and the “value of respect, both for the needs of others and for work itself” (p. 217). In the traditional setting the ritual of hand raising, which requires the student to remain seated at a

distance from the teacher and authorizes the teacher to selectively respond to students, the physical intimacy entailed in approaching and touching symbolizes both the immediacy of the request and the expectation that the teacher will respond to all the students albeit in time and in turn. (Cossentino, p. 217)

### **Evaluation**

The education system, be it Montessori or the traditional teaching system, trains new teachers about how to evaluate and monitor student progress. Various evaluative strategies are introduced to teachers, and appropriate methods are chosen. There are many to choose from: anecdotal records, running records, checklists, event and time sampling, or specimen records. There is one distinct difference between the two systems, and that is the concept of evaluating students based on quizzes and tests. The traditional school system follows the guidelines of the Ministry of Education, and the children are tested and quizzed on new units and concepts throughout the year. The traditional setting is structured and has definite expectations and standards that have to be met. Montessori follows the curriculum that is established by the TMTTI and covers the expectations of the Ontario Curriculum. As suggested by McCarty and Siccone (2001) 1 of the 10 means to motivate a person is to introduce “competitiveness and the desire for excellence” (p. 25). The tests and quizzes administered in the classroom motivate children to work and achieve high scores. Extrinsic motivation of children increases with the use of tests and quizzes, but in turn the intrinsic motivation of the child and the internal drive are diminished (Kohn, 1999). Ginsberg and Wlodkowski (2000) suggest that “some teachers grade only according to a standard; others consider effort and individual progress, and many teachers factor in classroom behavior” (p. 196). Montessori students

are observed on a daily basis, and the educator takes daily notes indicating if the students have mastered a concept taught or are making steady progress.

### **Tales from My Montessori Experience**

Montessori evaluates the students on a one-on-one basis and records are kept up to date and information is logged. When a topic is introduced to a student, the Montessori teacher places an “I” in her academic folder besides the activity that was taught.

Throughout the week the teacher will add a “P” to the academic folder once the child is making progress on the new lesson. Once the child has mastered the skill, an “M” will be recorded and the child will be introduced to a new topic. Montessori believed that “records be kept as simple and straightforward as possible . Elaborate records become increasingly time consuming and difficult to maintain” (Lillard, 1996, p. 92).

One of the new suggestions in Teachers College is to introduce teachers to new strategies other than tests and quizzes to evaluate students. As suggested by Freed and Parsons (1997) “our system of grading is a dinosaur; grades are entrenched in our culture but are subjective, arbitrary and a lazy way of quantifying how a child is doing in school” (p .175). The new strategies of evaluating group projects, oral presentations, poster board work, and essays allow children to express their imagination and creativity while conveying the meaning of the lesson. By providing students with a new means to express their newly found education affords them with venues “to demonstrate their proficiency by actually doing something: designing and conducting (and explaining the results of) an experiment, or speaking in a foreign language, or writing a play” (Kohn, 1999, p. 192). Children choose a method to present their work, and this freedom increases their



motivation and in turn they will be more inclined to put more effort into the assignment (Freed & Parsons; Kohn, 1993, 1999; Montessori, 1995).

The way a Montessori or traditional teacher structures her/his classroom and organizes the tables/desks is to assist the teacher in recognizing how a student is progressing (Kohn, 1999). By observing children, an educator can gain insight into who is having difficulty, who requires one-on-one assistance and which students are making progress. The frequency of tests administered is also addressed by Kohn (1999), who feels that parents should question why an educator has to quiz so frequently to determine how students are doing. He argues that the educator should already know. The traditional method of evaluating children with tests and quizzes does not address the needs of all of the learners in the classroom. The use of averages or letters are another remnant of an antiquated educational system that was designed to produce obedient, yet unimaginative students (Kohn,1993). Grades perpetuate the notion that the teacher is the absolute authority and the child exists only to parrot the instructor's thoughts (Freed & Parsons, 1998, p. 175).

### **In Lieu of the Graded Report Card**

As suggested by Freed and Parsons (1998), Montessori (1995) and Kohn (1993, 1999), parents should be given written reports or monthly evaluations that outline their child's progress and what material has been covered. The "written evaluation provides the parent with infinitely more information than a letter grade ever could; the written report should then be followed by a private conference with the teacher" (Freed & Parsons, p. 176). This alternative to grades allows the teacher to communicate with the

parents about how the students are progressing, and the written comments provide parents with more information than would a mere grade or percentile.

Montessori schools have a report card that is given to parents or guardians three times a year but is formatted differently than that of the traditional school setting. Children are not given grades or tests throughout the year; therefore the educator comments if the child has been introduced to a topic, has made progress with the new concept, or if the child has mastered the material and moved on to a new challenge. According to Damore (2004), in today's society we "judge children, teachers, and schools by test scores. In Montessori schools we find ourselves perpetually defending de-emphasizing standardized tests" (p. 30). In lieu of the tests and graded reports, the students complete journals and portfolios, and work is corrected with the use of a rubric (Damore, p. 30). The lessons taught and evaluations reported in a Montessori classroom allow for "cognitive and social/emotional development, consistent with program rich in experiences that meet the needs of the whole child" (Damore, p. 32).

Montessori classrooms are structured with a low student to teacher ratio and the educator has daily knowledge of how the students are progressing and will address each of their individual needs. The Montessori teacher is fully aware of which students will proceed to a new lesson and which students need to continue working with the same material. In my experience, having taught in both traditional and Montessori settings, the traditional classrooms usually have more students in their classes, and educators often have to move on and cover new material even if not all students are ready to do so. This moving on is often the case when students are identified with an exceptionality. The traditional school report card has a comment section as well as the overall grade; however

the section is usually scripted with prescribed comments from an administrator's prescribed notes and little personal information.

The Montessori report card is filled with sections that highlight what material was taught for that term, and the comment box takes up most of the space on the page. The comments are created individually for each child, with no teacher-based report card program to assist with the comments. Each comment is unique to each child, as each lesson is centered on the needs of each individual child. Once the written evaluations are sent home, the teacher will meet with the parents if the need arises or will send home the child's portfolio to illustrate their son's or daughter's work-in-progress. The portfolio is a wonderful tool that clearly illustrates the student's progress from the beginning of the year to the end of year. The teacher and child both choose which reports, classroom projects, and assignments to add to the portfolio. The collection of work showcases the child's work and clearly demonstrates their strengths, weaknesses, areas of improvement, and interests.

The traditional school system administers a Ministry-created document that is sent home two times a year. The students are also given an interim report once in October and once again in February. This ensures that the parents are informed of their child's progress, and any problems or concerns can be addressed at this time. The tests and quizzes given create the mark that is assigned to the report and demonstrates the child's strengths and weaknesses and what areas are in need of more work.

### **Bring Learning to Life**

The basis of Montessori experience is to make education authentic for students and to apply what they are doing and learning to everyday life. The same thoughts and

sentiments are shared by Ginseng and Wlodkowski (2000), who believe that if children are taught practical skills they will be motivated intrinsically (p. 3). Ginsberg and Wlodkowski (2000), Hargrove (2005), Kohn (1993, 1999), Lepper et al. (1973), McCoach & Siegle (2005), Montessori (1995), and Newby (1991), concur with the views of Beard and Senior (1980) that teachers need to make learning authentic and apply what is taught to everyday life. Beard and Senior (1980) suggest that “whatever students do as part of an activity or experience, it is essential that they should think, reflecting on its implications and what they have learned from it” (p. 55).

In both the traditional and Montessori settings, children are encouraged to head out into the world and experience what they are learning in the outside environment. Montessori (1994) and Beard and Senior (1980) suggest that outings are an excellent way to involve the students and “provide early experience outside of the classroom” (p. 57). An example of an outside experience might be if children are learning about money, and the educator believes the students have made significant progress, then they can be taken to a store and can purchase items on their own. This teaching strategy allows the child to take what he/she has learned in the classroom and apply it to everyday life. The child is given the opportunity to think independently while paying attention to the costs of the items and not spending over his/her limit. Montessori believed that it is the teacher’s role to take the child out of the classroom and “nourish the other facet of his intelligence, that which has to do with the external world and his activity. It is in this way that we will help him grow in discipline” (p. 21). Montessori suggests that when the child experiences the outside world and applies what is taught in the classroom to their everyday life, “the desire to know more on the subject is born at the same time” (p. 21). Children are also

afforded opportunities to cook and prepare meals for one another and for teachers/administrators. This activity is also carried out to a limited extent in the traditional classroom. The lesson learned by cooking “provides experiences in shopping, keeping records” (Loeffler, 2004, p. 17) that are the experiences of everyday life.

Children in the Montessori environment are not graded with a letter or given tests to find an average to assign a level or grade where they would fit. Rather, the children are given work at their specific level and are required to focus and pay attention to the work at hand. The motivation to complete the work on time and to his/her fullest potential is an internal one. There are children in the Montessori environment, however, who are not inspired internally and may need to be motivated by an external, tangible reward. This is fundamental to my current research and will give insight into what kind of effect extrinsic motivation has on the child, if any, and whether this motivation heightens the work ethic of the child and produces higher quality work. On the other hand, does the extrinsic reward diminish the purpose of the activity, causing the students to rush through the work to win the prize or tangible object at the end of the activity?

## **CHAPTER THREE: METHODOLOGY AND METHOD**

### **Research Question**

Through the use of interviews with Montessori experienced teachers I wanted to investigate the intrinsic and extrinsic reward system in their Montessori teaching.

### **I Situate Myself in the Study**

My experience as a teacher in the Montessori environment for 5 years and my experience with trained Montessori teachers makes me believe that Montessori teachers generally stay true to the teachings of Maria Montessori and the Montessori method whenever possible by intrinsically motivating students with the material in the classroom and with stimulating and exciting lessons. I was educated in the traditional school system and have experienced the various motivational strategies implemented by educators as well as a plethora of evaluative techniques. I personally support the importance of intrinsic motivation as championed by the Montessori system as a means of authentic motivation and focus in students. I was a Montessori educator for 4 years and taught students in a grade 4-6 split for 3 years and a grade 3-4 split for 1 year. The grade 3-4 split had on average 18 students, and in the grade 4-6 split there were 10 students. The classroom sizes were small in order to stay true to the Montessori philosophy of education that champions small classroom sizes and a low student to teacher ratio. I was the head directress in the classroom and was assigned a part-time educational assistant to assist the various learning challenges in the classroom.

### **Qualitative Research Methodology**

The goal of my thesis was to have a better understanding of why and how Montessori educators motivate their students and keep them on task throughout the day.

The information I gathered outlined the strategies employed by Montessori teachers to intrinsically and/or extrinsically motivate students. I chose qualitative research and interviews as suggested by Flick, Von Kardorff and Steinke (2004) to “contribute to a better understanding of social realities and to draw attention to processes, meaning patterns and structural features” (p. 3). As described by Hatch (2002), qualitative research is a means “to understand the world from the perspectives of those living in it” (p. 7) and a good means to find out what is happening in the classroom is by interviewing teachers. I collated the information gathered by looking recurring themes and differences from the 6 participants’ interview data. According to Creswell (2007), the “backbone of qualitative research is extensive collection of data, typically from multiple sources of information” (p. 43). The number of participants involved in the thesis provided information that suggested which system of rewards, intrinsic/extrinsic or both, were being used in the Montessori schools today. I also chose to include narrative descriptions of what I personally experienced in my Montessori classroom while I worked as a trained Montessori educator. As described by Clandinin and Connelly (2000a) narrative inquiry “is one of trying to make sense of life as lived” (p. 78). What better way to get involved in a study than to have had a similar experience yourself. The “links among people whose individual lives are quite different but who are affected by common structural and social forces can help the reader see patterns in that experience” (Seidman, 1998, p. 42).

### **Interviewing as Qualitative Research**

My method of inquiry included standard qualitative research techniques of semi-structured open-ended interview questions (Morse & Richards, 2002; Seidman, 1998). According to Morse and Richards, the interviewer “designs open-ended questions,

arranged in a reasonably logical order, to cover the ground required” (p. 94). I planned the general direction of conversation and areas to cover ahead of time and thought of pertinent questions that might elicit the information I wanted. I asked participants the same questions but not necessarily in the same order, and I prompted the participants with planned and unplanned questions to encourage elaboration of their responses and to promote clarity (Morse & Richards). Seidman, believes that interviewing “is a powerful way to gain insight into educational issues” and “is most consistent with people’s ability to make meaning through language” (p. 7). Seidman promotes interviewing and believes that it is one of the best methods of collecting qualitative data as a mode of inquiry. The interview process allows individuals to express themselves freely in their own words and to take their time (G. Anderson, Herr, & Singrid Nihlen, 1994) when responding to questions. The interviews in my study afforded the participants the opportunity to express their own perceptions and belief about the idea of motivation in a Montessori environment expressed in their own words. Anderson et al. describe the interviewing process as an important tool in “gaining a perspective on how others understand and interpret their reality” (p. 115). The interview process allows us to understand the thoughts and feelings of others. The participants offered their responses, which I transcribed verbatim. This process allowed me as the interviewer to gain an appreciation and understanding of the “lived experiences’ of other people and the meaning they make of that experience” (Seidman, p. 9). Individuals have their own perceptions regarding why we do things we do, and interviewing helps us understand their reasoning and that “our actions as interviewers indicate that others’ stories are important” (p. 9).



### **Semi-structured Interviews**

Semi-structured interviewing is deemed “appropriate when the researcher knows enough about the study topic to frame the needed discussion in advance” (Morse & Richards, 2002, p.94). Humphrey and Lee (2004) stress the importance of developing semi-structured interview questions that express “certain themes to discuss while being flexible enough to explore emerging paths during the interview” (p. 197). I asked participants questions that led to more in-depth discussions and revealed additional pertinent points beneficial to my line of investigation (Humphrey & Lee, p. 197). I gave each participant enough time to discuss what they felt was important around each question, and I did not interrupt them. If I needed further clarification or needed to ask a follow-up question, I did so at an appropriate break in the conversation (Morse & Richards, p. 94). One of the successes of semi-structured interview questions defined by Humphrey and Lee concerns “flexibility both in designing and refining the interview guides, and in actually conducting the interviews is probably the most important key to success in using this technique” (p. 340). I found the sequence of the questions and wording varied somewhat with each participant as I progressed through the interview, as I wanted to get information rich in detail (Anderson, et al., 1994). If the questions appeared to be worded in a way that the participants did not seem to understand clearly, I changed the format of the sentence to provide clarity and comprehension. As suggested by Glesne and Peshkin (1992) I found that an hour interview was ideal. I informed each participant that if they required more time that they would be accommodated; however none of the interviews exceeded 1 hour, and on average they ran from 30-45 minutes in

length (Seidman, 1998). According to Seidman, this interview method of collecting data may be difficult for individuals who are shy/timid and/or introverted. It is suggested that “overcoming shyness, taking the initiative, establishing contact, and scheduling and completing the first set of interviews can be very satisfying accomplishment“ (1998, p. 6). I followed these suggestions, as I wanted to make my participants feel as comfortable as possible.

### **Interviewing with a Narrative Approach**

The narrative approach was a way to bring my personal experiences to life and relate what occurred in my school pertinent to the comments of the participants. This method tells “a story that unfolds over time” (Creswell, 2007, p. 43). Clandinin and Connelly (2000b) describe narrative inquiry as one of the ultimate ways to “think about experience”(p. 80). Rushton (2004) shares the same sentiments as Clandinin and Connelly (2000b), and states that “narratives in the form of stories has become a powerful tool for researchers” (p. 65). In this case, my role as thesis student and researcher oscillated from “the inquirer experiencing the experience and also being a part of the experience itself” (p. 81). Clandinin and Connelly discuss that the narrative inquirer is under pressure and quandary as;

Some worry if inquirers do not become fully involved in the experience studied, they can never truly understand the lives explored. Others feel that by becoming fully involved, objectivity will be lost. To become fully involved implies that the researcher takes the same things for granted, and adopts the same standpoints, and has the same practical intentions as participants. (p. 81)

The inquirer must have the inclination to know when to enter data and detail of their own personal experiences and when to simply observe and take note of the participants' experiences (Dobson, 2008, p. 36). One of the main purposes of narrative inquiry is "to capture as much as possible, this openness of experience" (Clandinin & Connelly, 2000b, p. 89). It is necessary for the researcher to "collect extensive information about the participant....[and have a] keen eye to identify in the source material gathered the particular stories that capture the individual's experiences" (Cresswell, 2007, p. 57). Personal experiences are valuable in narrative inquiry and at times validate/reinforce sentiments and feelings of the participants. The stories are experiences viewed firsthand in the classroom and are related as a further means to contribution to the study. As suggested by Cresswell (2007), the information may be seen as the story and data that will contribute towards the study. It is very important for an inquirer to know when to share and when to listen and be aware of the "shifts between personal and social observations and their relations"(Clandinin & Connelly, p. 91). The narrations of personal experience are "valid to some degree and contain the seed of an important point" (p. 181). Every point made can bring about a story, facts, and experiences that the researcher can relate. This type of research "is a technique of interviewing, or listening, that relies on stories" (G. Anderson et al., 1994 p.122).

### **Field Notes**

Through my experience with this study, field texts were very important in the interview process. I revisited the information that I gathered from the participants several times for clarity and to enhance understanding. Where appropriate, I included my own personal experiences. Field notes as described by G. Anderson et al (1994) "capture the

sense of the conversation on paper” (p. 97). Scholarly research suggests that we bring “our own re-storied lives as inquirers, bringing new research puzzles and personal experiences” (Clandinin & Connelly, 2000a, p. 132). Narrative incidents contribute to the experiences that teachers undergo and confer what educators learn and why they draw the conclusions, assumption and decisions they do on a daily basis. According to Ruhston (2004), “lived experiences can be translated into rich narrative stories”(p. 65). I added field notes when I felt the participants’ emotions or facial expressions were important in that they would not be unveiled when I transcribed the data without separate notation. Seidman (1998) suggests that the field notes “help the interviewer concentrate on what the participant is saying” (p .57).

The type of inquiry I used in a narrative approach was acquired through life experiences and is autobiographical in nature. My and others’ life experiences of working in a Montessori classroom play a vital role in this research. Clandinin and Connelly (2000a) suggest “that there is a virtually endless list of life experiences that might be and frequently are turned into field texts as value to the inquiry” (p.115). Having taught in the Montessori setting, I have firsthand knowledge not only of what Montessori students are experiencing but also of the Montessori philosophy and the data collected from the interviews. As suggested by Dodge, Foldy and Ospina (2005), the role of the inquirer is “not claim to document reality, but to capture individual interpretations of reality as well as shared social constructions among a given community” (p. 289). The incidents are conveyed in a manner that is very similar to the telling of a story. The use of “storying and restorying one’s life enables a teacher to create new meanings from systematic inquiry and reflection” (p. 308). Throughout the narrative sections of the paper

I found the retelling of my personal experiences in the Montessori classroom to be thought-provoking. I enjoyed thinking back to the moments when I worked with the students and how I ran the classroom. As described by Golombek & Johnson (2004), narrative inquiries

are holistic and cannot be reduced to isolated facts without losing the truth that is being conveyed. Since narratives are social, relational, and culturally bound, they gain their meaning from our collective social histories and cannot be separated from the sociocultural and sociohistorical contexts from which they emerged. (p. 308)

The narrative process is unique to each individual and is a recount, somewhat like a tale, that the narrator is expressing. I share my narrative descriptions throughout the paper, but those from my interviews are not narrative reports; rather they were a narrative retelling of incidents.

### **Sample Type**

I chose the participants in this study using a purposive sample of convenience technique. Morse and Richards (2002) define purposive sampling as a method where the researcher selects “participants because of their characteristics” (p. 173). Creswell (2007) defines purposeful sampling as a manner in which the interviewer “selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study” (p. 125). The participants had the topic experience, time, and interest to take part in my study. Creswell suggests to find participants who are “accessible, willing to provide information” (p. 119). All were experienced classroom teachers who have worked with children in a Montessori

environment for more than 3 years and expressed an interest in the topic. The participants were all female, aged 30-55 years, and all were qualified Montessori trained teachers. On average there are only 1-2 males enrolled in the teacher training program (Toronto Montessori Teacher Training Institute). The ratio of female Montessori teachers is much higher than that of male teachers, and this fact was one of the contributing challenges when choosing participants. It is the role of the researcher to,

present the experience of the people he or she interviews in compelling enough detail and in sufficient depth that those who read the study can connect to that experience, learn how it is constituted, and deepen their understanding of the issues it reflects.

(Seidman, 1998, p.41)

I initially chose 6 participants for the interview process. Once the study began I was able to determine if enough data were collected to validate and add credibility to my study. Throughout the interview process I was in contact with my thesis supervisor to discuss the data that I collected and the length of the interviews. Together we decided that I had sufficient data with common themes and differences to complete my analysis. Seidman (1998) discusses in great detail when a researcher can determine when they have collected enough data and when no new findings are emerging from the data, then it is time to say “enough” (p. 45). I followed this advice and determined I had ample data to complete my study requirements.

### **Participant Background**

One of the participants I worked with in my previous Montessori employment expressed an interest in taking part in the study. Once I left my place of Montessori

employment, she (Paula) volunteered to take part in the study and I was pleased to have her as one of the 6 participants, as she is an active Montessori teacher with over 20 years of experience.

Two teachers volunteered to be part of the interview process. Paula completed her training at the Toronto Montessori Teacher Training Institute 7 years ago. She has taught lower elementary for 6 years. Paula's current school does not follow the traditional Montessori grouping of lower elementary grades 1-3 in one classroom. The classrooms are divided, and each room accommodates one grade because of the high number of students and the teacher to student ratio. Paula wanted to experience why the Montessori philosophy is taught in a 3 year grouping, therefore she spent 1 year in the first year (equivalent to grade 1), completed 2 years in a level 2 class, and three years in the last portion of the lower elementary section, level 3. Paula did not want to lose sight of the early years, and that is why she decided to spend time with all sections of the lower elementary classroom. On average there are 16 to 18 students per classroom.

A second educator, Theresa, was chosen from the same southern school, Valley View Montessori School. Theresa completed her training at the Toronto Montessori Teacher Training Institute and has taught for 7 years in the lower elementary program. She is responsible for the level 2 component that is equivalent to traditional school grade 2.

Sheila completed her training in Italy and graduated with her Association Montessori Internationale (AMI) training and completed her casa (kindergarten) training at the Toronto Montessori Teacher Training Institute. Sheila has taught at this school for 11 years in the traditional lower elementary classroom, and she also completed 3

additional years at another school in Montreal. Sheila prefers to teach the traditional 1-3 classroom, as she feels this allows the students the flexibility and opportunity to assist one another with their work. Her school has roughly 20- 25 students per classroom.

Another instructor, Mila, completed her training in Cleveland at the Ohio Montessori Training Institute and taught lower elementary, grades 1-3, for 17 years in the same school. She has 20 students in her classroom.

Paige completed her Montessori training in London, England, taught outside of Canada for 2 years, and then completed the advanced training in Italy. Paige returned to Canada, and began the first lower elementary classroom at her school and has been there for 18 years. She indicated that she has not attempted to teach the junior elementary as she is too fond of the lower elementary material. Paige has 18 students in her classroom.

Alexandria has taught for 22 years at various Montessori schools and has been working with her current school for a little less than a year. Alexandria completed her training at the Toronto Montessori Institute for her casa qualifications, and at the time it was AMI, and then she returned years later to complete her elementary qualifications. Alexandria is presently working at this northern school, Paxton Heights, as the Administrator and I asked her to participate because of her 20 years of teaching experience. The classrooms have 18 to 20 students per classroom.

### **School Descriptions**

I surveyed 6 educators in the Montessori education system in order to secure relevant information pertinent to my study about the intrinsic motivation and extrinsic rewards of a Montessori school environment. The participant Montessori schools were located in three unique communities: Valleyview in southwestern Ontario, Highlands



Montessori school in eastern Ontario, and Paxton Heights in northern Ontario. The schools are given pseudonyms to protect the anonymity of both the school and the participants.

### **Valleyview Montessori School**

Valleyview Montessori School is located in southwestern Ontario, in a vibrant picturesque community, part of a large urban center. The school has been open for nearly 10 years and has an enrolment of approximately 300 students with 40 staff. The school provides classes from casa to upper elementary.

### **Highlands Montessori School**

Highlands Montessori School is in an eastern Ontario city with a population of nearly 300,000. The school is located in a scenic area on top of a wooded hillside inside the city limits. The school offers classes starting from the toddler program to upper elementary and has an enrolment of over 400 students and approximately 60 staff.

### **Paxton Heights**

Paxton Heights, the third school selected, and is situated in an urban city in northern Ontario with a population of 150,000. The large urban center's community has historically relied on lumbering and farming and currently enjoys a diversified economy. Paxton Heights offers the toddler program to junior elementary, provides education for a little over 100 students, and employs 15 staff.

### **Procedures**

I made initial contact by telephone or by email to colleagues to explore interest in participating in this qualitative study. Contacts expressing verbal interest were asked to provide a timetable that suited their schedule. Interested participants emailed me, and I

provided them with a written small synopsis of what the interview would entail. The participants responded to me via email indicating their willingness to take part in the study, which on average was within one week. From that point forward we remained in contact prior to the interview to discuss a suitable quiet and neutral location, and if the day and/or time needed to change in order to accommodate their teaching schedules and their personal lives. According to Seidman (2006), the interviewees are assisting the interviewers with “something they want. Interviewers must be flexible enough to accommodate the participants’ choice of location, time and date” (p. 50). In emails I made the teachers aware that their interviews would be tape-recorded to ensure accuracy. Communication via “email is increasingly being used instead of written communication” (Flick et al., 2004, p.243). Having spoken to the participants on the phone and communicating with them via email prior to the meeting created a relationship between the participants and me, as the researcher. The importance of “contact before the interviewing begins is the best investment interviewers can make as they select their participants and prepare to begin the interviews” (Seidman, 2006, p. 50). The participants agreed to tape recording to ensure accuracy. The interviews were conducted away from school property at a quiet location chosen in concert with teachers. I wanted the participants to feel as comfortable as possible and encouraged them to choose the location, which added a relaxed atmosphere to our meetings. Throughout the interview I used open-ended questions to afford the participants opportunities to respond. Open-ended questions “unlike a leading question, establishes the territory to be explored while allowing the participant to take any direction he or she want. It does not presume an answer” (Seidman, 1998, p. 69). The ultimate “goal is to have the participant reconstruct

his or her experience within the topic under study” (Seidman, 1998, p. 9). I conducted the six interviews at the teacher convenience and at their preferred location over a 2 month period in order to accommodate our schedules and to allow for travel time. The participants were very accommodating and, when I suggested dates spanning a 1-week interval to conduct the interviews, the participants made themselves available and chose a time and date convenient for them from that week.

I tape recorded all interviews in their entirety, and I took field notes indicating any nonverbal responses to questions or anything else that seemed noteworthy that would not be picked up by the audio recorder. As suggested by Clandinin and Connelly (2000a) a tape recorder is deemed essential in narrative inquiry “because the stories are the target...getting the words right by using the tape recorder is important” (p. 77). I did not want the participant to feel that I was not paying attention to what was being said; therefore the use of the tape recorder allowed me to concentrate on what was being disclosed but was mostly used to ensure accuracy. Flick et al., (2004) discuss the fears that participants face with hearing their voice on the recorder and fear of not portraying a professional demeanor. As a result, the participants may not speak freely and will end with “contributions that are inhibited or reserved” (p. 210). In order to allay these fears, I tried to create an atmosphere that was friendly and accommodating from the beginning of the interview by ensuring that the participants were seated comfortably in a quiet place and were provided with water or coffee. Before the interview began, I thanked the participants once again for their willingness to take part in the study and asked them if they had any concerns that needed to be clarified. At this point I asked the participants to sign two consent forms, one for my records and one for the participants. At the time of

the interviews I presented the participants with the consent form to sign, and I addressed any of their concerns. Once the participants signed the forms (one for their records and one for mine), I stressed once again that I would keep all information confidential and that they could refuse to answer any questions or withdraw from the study at any time.

### **Data Management and Validity**

In the interview process, I gathered information from the participants' experiences, and I searched to find common themes. Seidman (1998) believes that this openness and "the authenticity of what she is saying makes it reasonable for me to have confidence in its validity" (p. 19).

Seidman (2006) suggests that the location "of the interview should be convenient to the participant, private, yet if at all possible familiar to him or her" (p. 49). I provided a secure and comforting atmosphere for the participants by allowing them to choose where they wanted to be interviewed, for example a coffee shop. The interviewer seemingly has two tasks (Flick et al., 2004);

On the one hand the interviewer shows the empathy by attempting to become part of the interviewee's presentation, in order to understand how he or she perceives and interprets the world. At the same time, however, the interviewer must develop a different approach to the subject which shows that, although the words are heard, the interviewer is uncertain of the meaning horizon of the terms for the interviewee. (p. 211)

Throughout the interview, I tried not to show signs that I agreed or disagreed with their opinions and kept my facial expressions to a minimum. My goal was to maintain a

comfortable accepting atmosphere and retrieve as much information as possible (Mehra, 2002, p. 2).

I scribed points when I felt the additional information would enrich my understanding of the data. During the interview, if the answers were not clear I asked them to expand their answers to increase my understanding of what they were trying to convey to ensure accuracy of their meaning. Asking the participant to clarify “shows the person that the interviewer is listening” (Seidman, 1998, p. 66). I transcribed the field notes and I interpreted the data, noting that some of the comments were still unclear, such as “slips of the tongue, incomplete words and hesitations” (Flick et al., 2004, p. 251). I emailed the participants some questions to further clarify what they had recounted throughout the interview. This extra step helped to ensure that the data were being interpreted accurately and allowed for a deeper understanding. According to Seidman, at times when participants clarify a thought or statement, they expand “more deeply into the nature of [the] teaching experience” (p. 67). The interviews were recorded on an audio cassette. The audio tape recorder was chosen as a means of recording the conversations accurately and to allow the participants to feel as though they were in a “climate for conversation in which the desired mode of presentation is already part of the ‘atmosphere’” (Flick et al., p. 211). Glesne and Peshkin (1992) support the idea of transcribing the information after the interview, as taking down notes at the time of the interview may cause the participant to feel that some of their ideas or concepts are not noteworthy and need not be put down on paper. Additionally a person cannot possibly write as rapidly as words can be spoken; therefore the issue of accuracy comes into play

(Seidman, p.97). Recording therefore ensures such accuracy, which lends to the efficacy of the study.

### **Preliminary Concerns**

I followed the required procedures to conduct research for my thesis and to gain ethical review approval from all necessary participants including Nipissing University.

### **Ethical Concerns**

I transcribed the interviews verbatim to ensure accuracy. I gave the participants and schools pseudonyms in order to help protect their identity. Seidman (1991) suggests that the transcribed notes contain initials “so that even if a casual reader were somehow to see the transcripts, no proper names would be present” (p. 50).

### **Issues of Ethics and Bias**

While we all have biases, I strove to maintain objectivity by treating responses with respect, and I gave the educators the opportunity to discuss what methods of teaching suited their own classroom and the needs of the children they teach. I relied on the experience of the educator in the classroom to direct the discussion. It is important to remain “open minded, value free and unencumbered by inherited ideas” (Patton, 2002, p. 99). I made every effort to remain nonjudgmental throughout the interview process and to value equally all information expressed by the participants. As a trained Montessori teacher and an Ontario certified teacher I too have opinions of how I feel children should be motivated and encouraged in the classroom. During the interview process, Maxwell (2005) recommends that the researcher must be aware of “possible biases and how you will deal with these is a key task” (p. 108) of the research. Throughout my 5 years of teaching I have had to use various strategies to keep the students motivated and on task;

however I made a concerted effort not to impose my beliefs or teaching methods onto those of the participants (G. Anderson et al., 1994; Seidman, 2006). The wording of the questions and the acknowledgement that I made as researcher throughout the interviews could have conveyed to the participants my feelings and opinions, so I made a conscious effort to keep any of my commentary neutral. I wanted to capture the thoughts and feelings of my participants (G. Anderson et al.). I tried faithfully to accurately document and capture what the participants disclosed. The combination of the field notes and the tape recorded interviews helped increase the trustworthiness of the data. According to Corbin and Strauss (1998), it is very difficult to remain free of bias, and they suggest that “there are certain gross indicators that bias might be intruding into the analysis, and when certain situations arise, we must stand back” (p. 97) and question ourselves. If I felt that I was allowing my bias to interfere I would take time away from the thesis, refocus my direction on the purpose of the study, and continue to move ahead with the research.

### **Issues of Confidentiality and Anonymity**

Once I met with the participants I explained to them that all of the information collected for the interview would remain confidential. I ensured the participants that the only people to have access would be my thesis supervisor and myself. I provided the participants with two copies of the consent form to sign (Interview Questions=Appendix A) at the beginning of the interview. They were asked to sign two copies of the form, keeping one for their records, and the second copy was given to me. Additionally, data collected during the interviews (tapes) would not show any name identifiers. The names of the school also would be changed and would not be shared with any individuals other than the thesis supervisor to ensure confidentiality.

### **Security Concerns**

I coded the transcriptions (Flick et al., 2004; Steinke, 2004) with the assistance of a computer (p.194). The transcriptions were kept in a locked box accessible only to me. The transcriptions will be destroyed by me after the successful defense of my thesis (Seidman, 2006).

### **Handling and Interpretation Procedures**

Once I had transcribed the interviews, I examined the six transcriptions, searching recurring for recurring themes (Glesne, 1999). I analyzed the data from the six interviews using a comparative analysis. I read the transcribed notes several times and took note of what themes were emerging throughout my discovery process. The method of transcribing interviews as noted by Flick et al., (2004) is one of “increasing recognition of the constructive contribution of this procedure and its rules to the representation of the processes which may be interpreted” (p. 193). There are pages and pages of data that need to be classified and grouped together in themes and categories, and to some researchers this may seem somewhat discouraging or overwhelming initially. I took the advice of Creswell (2007) and perceived the work as “working through multiple levels of abstraction, starting with the raw data and forming larger and larger categories” (p. 43). Once I discovered one theme, I searched throughout the other transcriptions for similarities and differences amongst the teaching practices that could be grouped together and supportive of one argument. Morse and Richards (2002) discuss how the method of qualitative research is not just a matter of performing techniques on data; rather, each qualitative method is a specific way of thinking about data and using techniques as tools to manipulate the data to achieve a goal (p. 33).



I compared and contrasted the findings from all 6 individuals to determine which means of motivation were used most frequently in their classroom settings. I looked for similarities, patterns, and emerging themes (Flick et al., 2004). The themes were determined by the data themselves as I read the transcription interviews several times. Once I noticed that the participants offered similar responses, I highlighted that aspect of the transcribed notes in a specific colour. Different colours were used for each theme to highlight a particular topic, such as freedom in the classroom. G. Anderson et al. (1994) describes the coding system as of “paramount importance” (p. 157) to the study. Having read the data thoroughly, I wrote the themes on paper in order to clearly and visually determine what I had discovered. I listed each theme and wrote the coded names of the participants who shared related information. G. Anderson et al. recommend that the interviewer separates and distinguishes “potentially interesting and important data”(p. 158).

### **Uncommon Data**

At the end of the analysis, several themes had emerged that were not apparent during the interview. Facts irrelevant to the study were left out, and I began to allocate the relevant information in sections by sorting through the transcribed notes and looking for the same highlighted sections. However, any information provided by a participant was not to be discarded, as it could lead to further investigations and prompt me as researcher to add a new component to the topic at hand. Perhaps only 1 of the participants experienced a practice or moment in teaching that the other 5 participants had not dealt with, but this was not omitted.

### **Limitations**

Some may perceive the small sample size as a limitation; however in qualitative research the in depth component outweighs the quantitative, as I am looking information that is rich in detail (G. Anderson et al., 1994). Three schools agreed and participated in this study, and 3 of the participants interviewed were from the same school, 2 were from another school, and the last was from a separate school. This study cannot be generalized to all Montessori schools and reflects the practices of only the participants from these three schools. Further research into the intrinsic motivation and extrinsic rewards utilized in the Montessori environment would perhaps add to the research, and I would like in future to expand my research base to other Ontario Montessori schools.

The travel time and teacher schedules were also impeding factors. The participants were all employed on full-time contracts and had very busy daily schedules. The time to interview the teachers was limited, as they all had to return to class or prepare for the following day's lessons. The time constraint might have limited some of the information given, as the participants' responses may not have been as full and complete as they might have been if they had more time.

## **CHAPTER FOUR: INTERPRETATION OF DATA**

During this stage of interpreting my data, emerging themes became apparent from data in the transcribed interviews. I have grouped my findings according to the common themes and how they relate to motivation in the classroom, intrinsic/extrinsic strategies. Information pertinent to each theme I documented separately.

### **Participants' Description of Intrinsic Motivation**

I asked the participants to conceptualize and define their idea of intrinsic motivation. All of the definitions had some similarities and differences. Theresa described intrinsic motivation as occurring when a person is “motivated within yourself, they want to do the work, want to learn new lessons like most of the traditional Montessori school kids.” At the time of the interview I neglected to ask Theresa what she meant by the term “traditional Montessori school kids” and she clarified this statement via email. Theresa described traditional Montessori school kids as children who can work independently without constant reminders to stay on task and to get work done. She went on to explain that these children “can be shown a lesson and actively realize that it is their responsibility to follow up and choose the appropriate work that will challenge them and help them actually learn and continue to move on to the next lesson” (Email clarification). The children in Theresa’s classroom she described as “motivated internally and are inspired to go onto other lessons, they just seem to have a love for learning” (Email clarification).

Alexandria reiterated Theresa’s idea that intrinsic motivation “is an internal desire, an internal energy that encourages the child to complete an activity.” She gave an example of a child in a casa classroom that works diligently at a drawing, knowing that

s/he has the whole week to complete the task. The child is not rushed, and there is no extrinsic end reward. Alexandria explained that the motivation is “the process of doing it [the drawing]...the accomplishment of a beautiful picture.”

Paula described intrinsic motivation as, “when you are doing work because it makes you feel good or you are doing it because you really want to and you have a passion to do it and get the job done and to learn more.” The feeling comes from within the child and does not require urging from a teacher or from a parent. The child is completing the task for the pure enjoyment of the work. Sheila suggested that the drive is “coming from themselves, they are pleased about their own work, and want to do well for themselves.” Paige commented that she strives to create students who are “motivated to do something for their own self-satisfaction, rather than doing it for me or for mom, dad, or to get a praise...tangible rewards from the outside.”

### **Participants’ Description of Extrinsic Motivation**

Extrinsic motivation was a term that 4 of the participants were familiar with and appeared to answer with confidence. Teresa referred to the term as “really neat, like outward rewards, stickers, or just praise.” Alexandria described it as “an external reward and that would be for setting very short-term goals for children, in particular who have special needs or are not able to concentrate.” She gave an example as a reference during the discussion:

You know when you finish this page of math you get a sticker. When you put your toys away you get a treat. When you behave in the supermarket, I will buy you something. When you graduate from high school, I’ll buy you a car. When you graduate from university; I’ll give you \$10,000. Unfortunately

the extrinsic rewards just get larger and larger. The person is working for the reward, they're not working for what they're attaining in the short term.

Paula described extrinsic motivation as the child working "for a type of reward." She gave several examples of "the teacher or your mom saying, good job, or a sticker, a red check mark, and it is very good." Paige was familiar with the term and had an interesting point to add from a personal experience she encountered with her daughter. She attended Montessori, and when she left "and went in to [the traditional school system], I'm sure the teacher had drawers full of chocolate bars and that type of things, where I really like the children working for their own enjoyment." Sheila asked for clarification before answering. She answered with, "I don't know, extrinsic would that be pleasing to the teacher?" Then she continued to make reference to "grades as a reward." Mila asked to come back to the term and then answered with "something that you're providing for them [the students]." Mila continued to discuss the use of a "sticker...that's totally non-Montessori!"

### **Tales from My Montessori Experience**

In my personal experience, the use of stickers and treats in the classroom is certainly a form of extrinsic motivation. It definitely seems to work at times and may keep the students on task and focused. At times I inform the students that I am going to collect the work they have been assigned. This information ensures the students are successful, as they can ask me or their peers for help if they are struggling with the concept. On the other hand, I am pleased as the students are all working productively and there are very few discipline problems to address. The students are working diligently to

complete the required work that will be graded, and there is little time for behaviour that is off task.

### **Freedom and Choice**

One theme that was apparent throughout the interviews was the need for student freedom in the Montessori classroom. Four of the 6 participants touched upon a similar theme, that of the teacher acting as the guide, allowing children the freedom to explore for themselves. An example of this might be the creation by the teacher of a nature shelf in the classroom with bird nests, acorns, parts of a tree puzzle, classification cards, or pictures. The child explores this shelf by choosing which material s/he would like to work with and chooses to work at his/her own inclination. Paula believed that teachers are “to guide the children and not to hand it all to them, but just to guide them.” Allowing choice in the classroom encouraged children to be more intrigued and wanting to explore even more. Theresa agreed with Paula about allowing children to work independently, “given a little guidance but that they have their freedom within limits to choose what they will be working on.” Freedom in the Montessori classroom was one of Maria Montessori’s philosophies of education that is still a key element of the current Montessori classrooms, at least according to these 6 individuals. Alexandria also supported the idea of freedom in the classroom and reiterated some of Montessori’s methods of observing a child and allowing him/her to freely explore material in the classroom. Alexandria suggested that “there are very few schools that allow the children to work in that way, because like everything else, we are moving too quickly, children are exposed to too much too early.” Mila too agrees that if children are given the time to independently explore and choose work, they will “do a lot of learning on their own and

with each other.” The atmosphere in these six classrooms encourages the children to work at any desk; there are no pre-assigned seats. Half of the participants described a classroom where the children are free to work with whom they choose during group work, and this group work can change at any time: daily/weekly/hourly.

According to Montessori (1966), freedom in the classroom works best if the teacher is organized, plans ahead, and changes the material in the classroom on a regular basis. If children have worked with the material for a few weeks, it is the teacher’s responsibility to change the displays and introduce new classification cards or material. Children remain interested when the work is new, exciting, and challenging. If the classroom layout and manipulatives remain the same for a long period of time, the passion and drive that children naturally possess to explore the classroom may diminish through boredom. As a result, learning can be impeded, disrupted, and truncated.

### **Tales from My Montessori Experience**

In my own Montessori classroom, I encouraged freedom of choice when I felt it was appropriate, but definitely within set limitations. Students had freedom in the morning to select which work they wanted to complete: mathematics, independent reading, language, or journal entries, but all of these subjects had to be completed during the school day. They had a check-off list at their seats that itemized each subject along the left side and the days of the week along the top. This listing assisted students in keeping track of what work they had completed and what work needed to be finished. Students sat where they were comfortable and had the choice of working with peers or by themselves. They could complete the work on the carpeted mat on the floor, at a table for eight or alone. Freedom, I believe, is one of the inherent benefits of a Montessori

teaching environment. Allowing the students to sit where they choose develops their skills of thinking independently, can enhance problem-solving and decision-making depending upon what type of learner they are. I rarely intervened unless the students made decisions that I felt were not in their best interest and if they seemed not to be working to their full potential. Many of the students chose to work together, and if they were working with peers that were distracting them or they were off task I would give them two warnings; then they would have to move to another location in the classroom if the chatting or disruptive behaviour persisted.

Students who required assistance generally worked with a friend who helped them with any questions that required clarification. If a student could not grasp the work or understand what needed to be done s/he would ask me for assistance. This practice removed some of the demands from me so I had time to work with other students independently, and the children learned how to help one another. One of the rules we had in the classroom was “Ask 3 before me,” and I found this to be a great strategy. The students had to work as a community and help each other in need, and everyone had an opportunity to shine as each student had a strength in one area that perhaps another students did not. Students treated each other as equals.

In my view, allowing students to choose their work and work freely in the classroom is a concept that has to be monitored closely; occasionally you might encounter a student who abuses this freedom. The freedom is to choose work that is at their level and that motivates them to move onward. At times, students will choose work below their academic level in order to fulfill the requirements of the day. I experienced this difficulty with about 1 out of every 10 students in my classroom.



### **Reaching Children at Their Academic Level**

Another finding that 3 of the 6 educators offered was that children should be taught at their own academic level. If the material is too difficult or alternatively too easy, children may lose interest in the topic. Alexandria does not believe that children are given enough time to learn through experimentation in today's fast-paced society. She argues that the root of the problem is "people don't slow down and allow the learning to happen, this is a real problem, because they want a product." The product is a child that is working at grade level or slightly above. The Montessori environment as described by Paige is meant to "maximize their [the students'] potential so they can go at their own pace." Working at their own pace would seem to ensure that children are focused and motivated and that the work is not too stressful. Paige believes that this is "the beauty of Montessori education." Mila pointed out that the children should be allowed to "work at their own pace, choose from different activities, learn how to choose, how to make decisions, and to work independently." Mila commented that she structures her lessons around each child and tries to scale them appropriately for each student.

### **Tales from My Montessori Experience**

I agree with these mentioned sentiments, as I had students who were working three grades below level and would not have succeeded if they had not been given grade-appropriate work. I had a full-time teaching assistant assigned to my classroom, and she was a great addition to our learning environment as well as a good resource. In a three-grade split classroom, often there are students who are working above grade level and those students who are working below grade level. It was my responsibility to ensure that all of the students were working in the appropriate groupings for mathematics and

language lessons. There were four different mathematics groups and four language groups. The groups were based upon the students needs grade 3, grade 4, grade 5-6, and grade 7. Some of the students' were given enriched work, while others were working at grade level.

One of the most important tools in determining at what academic level the students should be working is by consulting/communicating with the classroom teacher from the previous year. One can struggle at the beginning of the year trying to determine where to place 18 students who are at various academic levels. Through this initial struggle in September, one can marginalize the learning of a few students, as they might experience anxiety, stress, and feelings of failure. It is critical that students begin the year on a positive note. Before September, I read previous teachers' notes and comments and discussed any immediate concerns with the educators ahead of time in order to facilitate our progress in enhancing student success. It was very useful to ask for input from the previous educators regarding strategies to alleviate concerns.

### **No Timetable, No Agenda**

Three of the 6 teachers did not use a daily agenda that outlined what was planned for the day on the chalkboard. The participants felt that if a child was working on a particular task and was engaged, s/he should not be disturbed to be taught a formal lesson. The participants felt that adherence to an agenda could interrupt the learning process. Mila suggested that in her classroom,

a child might be doing this incredibly wonderful project and they spend 3 hours

working on it, doing handwork on it, models or labels, whatever they're doing....  
if they are really working well and accomplishing a lot, I don't feel right about  
just saying "O.K. you need to do math right now."

Mila commented that if a child never tries any other subject work, such as Math, English, or Science, but continues to work on History all day s/he may require redirection. Mila will observe the child and determine whether or not he/she needs to move on to Math or Language. Paige does not use an agenda in her classroom but did comment that one year she had to resort to using an agenda because she had a lot of children who "needed to be focused externally." The students could not keep track of what subject work needed to be completed each day, and a system, the agenda on the board, was required in order to keep the students on task. Paige found that the agenda took away the natural instinct of the children to explore the classroom, and she indicated that she had to encourage the children to explore the materials on the shelf. The mornings in a Montessori classroom are spent with the teacher, and there are no specialty classes scheduled during this time frame. The specialty classes, such as French, Music, and Physical Education, are scheduled in the afternoon. This method of teaching ensures that children can work on a task/project without interruptions. If children require a break or snack, they can sit at the snack table in the classroom, have a bite to eat, and then return to work. The daily lives of children are very busy, and their evenings are filled with practices, appointments, and extra curricular activities. Children need to be given time to concentrate and to complete a task from beginning to end. The traditional public classroom can also function this way for special projects, but such practices are not necessarily common throughout the day-to-day routine.

### **Tales from My Montessori Experience**

I agree with much of the commentaries mentioned. The use of an agenda may have positive and negative aspects. The agenda can be a useful tool to assist students who have a difficult time staying on task, have learning exceptionalities, or cannot concentrate. The time frames provide guidelines that students have to work within in order to complete the work within the allotted parameters. I have had to resort to an agenda upon occasion, and it did help many of my students that needed extra support who had a hard time making their own decisions. Due to the nature of the Montessori classroom and the three-grade split, some of the students that started with the agenda no longer required this system once they learned how to manage their time efficiently and began to work to their full potential on their own without my direction. This is one of the philosophies of Montessori education that's intended to produce independent learners who can think for themselves (Montessori, 1967).

I am aware that some Montessori classrooms use agendas for the entire class. I did try this strategy, and I found that because of the diverse nature of the various learners in the classroom, it was unsuccessful. The set agenda for the entire classroom in my view interfered with the learning process, and students who were fully engaged in mathematics or language had to be told to put their work away as it was time to begin a new lesson in science. Their intrinsic motivation and energy for the subject were interrupted as we had to move on to something new. I felt that I was continually interfering with the learning that was supposed to be taking place in my classroom. I quickly abolished the use of the agenda for the entire classroom and used this tool for only those students that required more structured direction and were not prepared to take on the task themselves. This

strategy speaks closely to the individualization of the Montessori philosophy (Lillard, 1996, p. 24). A teacher must be flexible and use tools that will stimulate and motivate all students to learn and be inquisitive, keeping the focus on the individual nature of each child.

### **Discipline**

Although I did not ask specifically about discipline, 4 of the 6 participants mentioned dealing with discipline issues as a component of their personal teaching philosophy. The idea of discipline in this context refers to how to deal with inappropriate behaviour, such as children off task, interrupting their peers in the classroom, and speaking out at inappropriate times and disrupting the learning atmosphere. Paula, Alexandria, and Paige stressed that it is crucial to have a measure of control in the classroom but to also have fun. One of Paige's philosophies is to have a classroom with "structure and discipline, and the environment set up ...so the children can function and become independent and fulfill their potential." The classroom is one of the most important aspects of the learning experience, and Montessori teachers are trained to understand that once the environment is established and organized, the students can enter to learn. Theresa and Sheila emphasized that they have strict guidelines for their students. They explained that they have high expectations for the students and that students know what needs to be done. Freedom of choice is meant to motivate students to learn and is not a license to be lazy or to choose work that is below their potential. Teachers keep a close eye on the students, and if they are not choosing appropriate work educators will intervene and redirect. In redirection, students may be given two choices from the educator or the educator will choose new work for the child. Sheila described her class

as a busy classroom with children working diligently with an apparent “love for the work.”

### **Tales from My Montessori Experience**

I remember in my Montessori training that my instructors told the class that when you walk by a Montessori classroom it will not be a silent classroom with rows of desks aligned and all of the students working on the same work. The sound of a Montessori classroom is one that is humming, children walking freely to return or choose new work, and children working co-operatively. In order to allow for this movement to take place and for the freedom to choose work to take place, appropriate behaviour patterns must be established the first day. It was recommended by our trainers that an educator ought to establish classroom rules with students on the first day of school. I did this routinely at the beginning of each new year, and I found that this strategy brought the students together, working collaboratively as a community/family to establish rules that we would all follow in our new environment. The collaborative exercise of creating new rules also gave new students an opportunity to work with other students in the classroom. Students took the rules seriously and were truly bothered when these rules were not respected by others in the classroom. The rules the students generated were a mirror image of what I would have written, and the advantage of having the students complete this collaboratively was a very positive group learning experience. This formed the foundation for the development of a co-operative learning environment.

Having classroom meetings is a strategy that I have used successfully to address discipline problems. These meetings were scheduled for the last period of every Friday; we would sit on the carpet together as a group and discuss classroom issues. A speaker

was chosen each week to run the meeting, and s/he would hold our classroom mascot. If another student in the classroom had something to share, the mascot was passed to that student to indicate that s/he was speaking and that we had to listen. One aspect of the meeting that the students enjoyed was the first phase when we passed the mascot around to each student in the classroom. At this point they each had an opportunity to compliment a peer for a kind act that was done by or for them or something positive they observed that was worthy of recognition. The sequel of the meeting that dealt with the majority of the discipline problems faced in the classroom occurred when students shared their concerns about situations that occurred making them unhappy or if they had an experience that hurt their feelings. We would all listen, and the students would offer advice, apologize to one another, and problem solve as a group. They felt like they were part of a community and were not comfortable or happy when the classroom was not running smoothly. The skills learned from these meetings may assist students in future work activities. These exchanges also aided in establishing learning environments that fostered giving students voice and empowering them to take responsibility for their actions.

### **Split Classrooms**

Three of the educators discussed the concept of the three-grade grouping in the classroom. The other three participants work in schools that opted not to accommodate the grades 1-3 in one classroom. When I read over the transcribed notes, I realized that I did not question Theresa and Paula any further concerning why their school accommodates only one grade in each classroom. I emailed Theresa, and she clarified the concept of only one grade per classroom in her school. She explained that the population

of her school is quite large and usually Montessori schools are much smaller. She suggested that it is more feasible “for the teacher to keep track of individual student progress and for administration to be accountable to student progress, if the classes are smaller” (email notes). Also the school is seen as a “hybrid school,” which means that in the higher grades the students are placed in a more traditional private classroom setting and the shift moves from Montessori education to traditional. The separation into individual grades prepares the children for the shift in the higher grades. Sheila indicated that the whole concept behind Montessori education and the philosophy is centered on the three grade levels in one classroom. Sheila emphasized that it is “so important, that they [the students] can help each other out”; this way they can develop and grow. The whole concept of the three age levels together is to have the younger children learn from the older children and vice versa; “it sort of sets it apart from the mainstream educational system...the whole idea of independence being encouraged.” Montessori observed children and determined that if they were given the proper environment and the freedom to work and assist one another, they would master skills.

### **Tales from My Montessori Experience**

Maria Montessori’s method of teaching encourages/promotes the three-grade grouping in one classroom. As described earlier by the participants, some schools do not stay true to this method because of school numbers and staffing issues. My school, on the other hand, was a small school of 100, and the classrooms were initially set up adhering to the three-grade grouping. During my second year of teaching, the grades were grouped by two years; grades 1 and 2, grades 3 and 4, and grades 5 and 6 in separate classrooms. The people I have spoken to and the schools that I have visited all have



groupings based on the Montessori school owner's or board's interests. There are schools that insist that the classroom is grouped according to the three-grade grouping as suggested by Montessori, but on the other hand there are schools that have each grade in its own classroom. This strategy suggests that boards use flexibility and discretion.

I strongly believe in the three-grade grouping and I see how the students I presently teach in the traditional setting might benefit from this structuring. While teaching in a Montessori classroom, I experienced firsthand how the older and younger students assisted one another, and this sharing added to the sense of community in the classroom. It also developed their sense of belonging and heightened their confidence levels. It is a crucial step involved in establishing a foundation for good citizenship, in my view.

### **How to Motivate?**

I queried all of the participants about classroom motivation. Paula commented that in order for a child to be motivated the lessons must be practical and apply to everyday life. Children need to know that they can use the skills they are being taught in the classroom and apply them to the world outside of the classroom. She indicated that when she is teaching her students the decimal system and “adding money” she does not provide the students with math sheets to answer. Paula relates the lesson to events outside of the classroom; she brings in catalogues, and the children are given a certain allotment of money and are told to purchase items from the catalogue. This strategy is also used in the traditional school system to teach this concept. The use of concrete materials brings the concept to life for children. Paula described the learning process; “You can go from cue cards and handouts, and it is all so boring when it can easily be

brought to life.” Mila and Paige agreed that the lessons need to be inviting and fun in order for the children to be interested. “I’m not saying bells and whistles, but just try to put some personality into it.” Mila believed that children are intuitive and can tell if an educator is not interested in a lesson or is ill-prepared. The added excitement and aspect of fun intrigues the students and they will eagerly take part in the lesson. Mila, Paige, and Theresa agreed that children need to be challenged to motivate them to work. Mila made reference to the spelling tests she assigned the students weekly. Her grade 3 spellers are quite advanced, and she decided to challenge them and have them choose words from the dictionary for the spelling tests. The children in this particular classroom will “get out dictionaries... look for really tough words, and really challenge themselves.”

The concept of taking away privileges to increase motivation was discussed by the educators, and there was a difference of opinion regarding this issue. Sheila and Paige agreed that they do take away privileges, such as recess. Some participants felt that if students were informed ahead of time, and they did not complete a particular task by recess, they would forfeit recess to complete the work. Paige emphasized that she believes children need the physical activity and on occasion might keep the children in for a portion of recess. Alexandria and Mila disagreed with keeping the children in from recess to complete unfinished work. Alexandria and Mila stressed that if a child needs to refocus, then it is the role of the educator to remind the child to stay on task. Alexandria does not “like to take away privileges; I don’t see that recess is a privilege,” rather something that is essential to the children and should not be taken away. Alexandria does agree with keeping children after school, similar to a detention. Mila also shared that

students who are kept in at recess are sometimes perceived as the bad students, and she prefers to deal with children one on one, discreetly in the classroom.

### **Tales of My Montessori Experience**

Motivation, in my experience, is one of the most difficult concepts to express, since it is applied differently with different students. I found that students were on task and working diligently when they were intrigued by the work and it was focused on a topic that piqued their interest. Students were curious as to why the sky was blue and the grass was green. These questions are relevant to what they see in the world, and they could apply what they were learning to the outside world. Work on art projects or science experiments allowed little time for behaviour problems to surface, as students were intrigued and interested. Students were informed in advance that their behaviour would dictate the completion of art or science projects, and appropriate class behaviour generally resulted in the completion of projects. Children usually respected this approach and behaved remarkably well.

Lessons using the computer to research information, followed by art work, a presentation, and the preparation of bristol board displays were the kind of projects that students loved and worked at diligently for hours in the classroom. They always had the choice to work with a peer or alone, and if they did choose to work with peers they selected their own groups, thus learning problem-solving skills. These skills must be acquired and this is done so only through experience. Educators at times ignore the importance of problem-solving, and in a Montessori environment, students are encouraged from the beginning with these expectations. Children are in an environment where they must make decisions for themselves and work with people whom they trust,

which in turn helps them develop independent decision-making skills important for further intellectual development and maturity.

### **Motivation: Intrinsic and Extrinsic**

The notion of intrinsic and extrinsic motivation in the classroom as a means of encouragement did generate much discussion. All 6 educators initially indicated that they did not use extrinsic rewards in the classroom; however, as the conversation progressed there were discussions about praise, stickers, parties, and grades that were used in five of the classrooms. Praise, as described by Kohn (1993), clearly states that is a form of extrinsic reward. Paula emphasized that she does not believe in giving the students stickers or writing comments on their work. She did indicate that if we were to look through the students' math books, every 20 pages we might find a happy face, but that it does not happen often. Alexandria and Mila indicated that they reward children with extra self-choice work time. The reward is that children are allowed to choose material from the shelf when they are finished what they were working on. Mila explained that in her classroom she encourages children to complete a task and then kindly suggests "if you stick with this and we try to get it done, then maybe you might like to do that poem you were talking about." The reward is the poem. Mila emphasized that she does not give children tangible rewards. The introduction of extra science experiment time was one concept that Alexandria explained with great enthusiasm. Science is one of her passions, and she uses it as a tool with the students: "If everybody was reasonably behaved, did a reasonable amount of work, then at the end of the day we got to do science experiments."

### **Tales from My Montessori Experience**

Montessori is one area that I struggled with at the beginning of my career. How could I keep students motivated and on task with few disciplinary problems? How does one accomplish this? I gave in to the “marble party idea” and “talking challenges” to keep students on task and motivated to work for the reward that they would receive once the marble jar was full. The marble jar is a system of rewards that I have seen in several classroom settings, and I used this concept for my first year and was very pleased with the results. A student in the classroom will call a no talking challenge or a whispering challenge for an allotted amount of time, and the value is worth a certain number of marbles. The students determine the amount of time and the number of marbles. The student who initiated the challenge would bring the timer to his/her desk and time the event. Once the allotted time was up, and if the students had worked quietly, they filled the jar with the predetermined number of marbles. On average, it took 1 month to fill the marble jar. As a group we decided what we wanted to do. The activities ranged from building forts outside in the snow, to sliding parties, renting one of their favorite movies, or preparing food together. Towards the end of my first year I knew that this method of rewarding the students was not true to Maria Montessori’s philosophy of teaching and I also noticed that the marble jar and talking challenges began to lose their novelty. Thus I began to question the use of extrinsic motivators as a means of achieving assignment completion. During my second year of teaching I no longer used a system of rewards in the classroom, and I personally believe that students have to work for themselves and that the motivation to complete an assignment should come from within. I should not be

encouraging them to strive for a tangible reward at the end of the process. This is the point where I began to understand that it is imperative to develop teaching and learning strategies that would foster intrinsic motivation in the students.

### **To Praise or Not to Praise**

Praise is one method of rewarding that Mila, Alexandria, Theresa, and Paige discussed. Mila touched upon a very important aspect of praise that I addressed in my review of the literature. First-year teachers tend to over praise and “wasn’t everything wonderful.” She described praise as a tool that, if overused, the children work for your reaction “and then they’re not really doing it for themselves.” As a more experienced teacher she has “really learned how to cut back on that kind of stuff.” Mila added that besides using work as a reward, or praising children, she prompts children and asks them questions that will keep them focused or give them insight into how they are doing. Mila explained that educators should encourage children to ask themselves if they feel they are doing a good job and not to look to the educator. Children should be responsible for work completion and understanding and to work to their fullest potential. She fosters this work ethic by implementing probing questions: “What do you think of that?” or “How do you like your writing?” Mila strives to “have them [the students] try to critique it more or evaluate it, instead of you [the teacher] being the one.” Alexandria also asks the children questions: “How do you feel about this work?” In Alexandria’s opinion the use of questions allows the children to be aware of their accomplishments and realize if they did a “sloppy job.” Mila admitted to praising the students if she felt that they truly deserved it, “especially if it’s with somebody who might have done this big piece of work.” Mila will comment, “Wow, that’s really great!” but now realizes as a more experienced

teacher that she does not “want to overdo it because you don’t want them doing it just to please you.”

### **Tales from My Montessori Experience**

Praising is one motivator that I implemented often during my first year teaching. When the children completed a task I wanted them to feel great about themselves, and I encouraged them to “keep up the great work.” Once I read the book by Alfie Kohn, *Punished by Rewards* (1993), I understood that what he was explaining in his book was what I was doing, overpraising. Presently in my teaching career I am working with high school students, and I want to encourage them, but I only praise them when I feel it is necessary and appropriate. I would be very disappointed if I told the students that they did a great job or that I was proud of them and I was not taken seriously or my compliments were not taken to heart. Students are very intuitive and know when they have earned the respect and positive encouragement of the educator. Praise given when underserved develops apathy.

### **Eager to Please**

Children in grades 1-3 are at the age where they “want to please you [the teacher],” and Paige stresses that she does not “want it [praise] to become their goal.” She added that the need to please the teacher might be “part of the culture at home.” Paige enunciated the same points as Mila, and she made reference to the Montessori philosophy of teaching regarding praise. The “Montessori literature she [Maria Montessori] says it [praise] can often interrupt and get children off track, so I try not to praise so much when they are in the midst of work.” Paige admitted to praising children whom she felt “need a little bit.” She clarified that “it’s not something that’s to please

me,” she comments on the flower for example that they did a great job with that particular piece of work. Paige described that she comments on the work when she feels it is “warranted,” and she added that she does not use “false praise.” The use of excessive praise and not being genuine can take away from the work or the intrinsic motivation of the child. Paige specified that the use of praise has to be “genuine, otherwise it can lower the standard.” Teresa admitted that she does “praise, but I just don’t go overboard.”

### **Tales from My Montessori Experience**

I did notice that elementary students always want to show you their work when it is completed or while in progress. I believe the reasoning for this is that they want you to tell them they are doing a great job and some students are looking for positive reinforcement. I had one student in my classroom who was in grade 3 and she could not finish a task without coming to show me her steps along the way, and was constantly looking for positive feedback. This student was one of the most popular students in the classroom and was one of the highest achieving. I had a talk with colleagues and my principal in order to find strategies to encourage her to work independently and feel proud of herself for what she had accomplished. I was not comfortable with the thought that she was working only to please others. I began to use the strategies suggested by my colleagues and began to ask her questions regarding her work when she approached me during a work period. I would ask her “Are you proud of your work?” “Do you feel that you did a good job?” “Is there anything that you would change?” This strategy seemed to settle her. I did not have to give her constant feedback for the remainder of the term, and she began to recognize her own strengths.



### **Encouraging Comments**

Mila, Alexandria, and Paige discussed the use of writing encouraging comments on the students' work. Alexandria mentioned that she did not grade assignments with a mark but that she "only put comments on things." Alexandria has never worked in a Montessori school that required a grade on school projects or work. The grade suggests that "there's always something that can be improved." Regardless if the child scored 70% or 95%, the remaining percentage that was missing alludes to the belief that "there is always something that can be improved." Paige does not use a grading system in her classroom and suggested that she did make a few exceptions for children in her classroom that required "a little bit of a boost." The methods she employed with those particular students were "a little comment or a little smiley face." Her rationale for using this system is for children who are "down." She continued by clarifying, if "there's a separation in the family or they just need a little pick-me-up." Mila indicated that she does comment on their work but is very careful with this strategy, especially with the children who are in grade 1. She does not want her students to become learners who are continually searching for praise and recognition. When she looked over the grade 2 and 3 students' work, she indicated where they made errors and where improvements could be made, but with her first year students she hesitated to comment on their work "at the beginning of the year." Mila did not want to point out their errors or praise them for work well done, as she wanted them to stay focused on what they were doing and not dwell on several errors or perfection. As the year progressed, she began "to start pointing things out." She believes that if she began to use this system of marking in September, "they

[the students] probably would never want to write again.” Mila does not feel that it does students justice to be “on them all of the time,” because they learn how to spell phonetically in Casa; “you [the teacher] can’t expect them to know it all.” Mila commented that she does put a grade on their spelling tests and that students “like to be tested to a certain extent, because it makes them feel so good if they are right.” Theresa agreed with Mila that the children like to have a grade on their spelling tests “if they ask,” but she does not record the mark in her grade book and the children write the grade themselves. Theresa is not sure why children ask for the mark, but one reason may be that if you are going to give a spelling test, “I guess it [a grade/mark] is expected.” She concludes that wanting a grade may come from home when they are practicing with the spelling words with their parents, and this is a demand put upon children as society tends to expect it. Theresa emphasized that she had “never done that [grade the students]; I would never do that [grade the students].” It appears that the grade on the test is of importance to the children, and one is to question if this is a thought or desire that occurs naturally within the child, or is it a learned desire from society and parents.

### **Tales from My Montessori Experience**

The school that I was teaching at did not use a system of grades for the students. All of the work completed in class was corrected, but we did not assign a 10/10 on the paper; rather we indicated where there were errors made in order to make the students cognizant of what areas required attention. I never used a red pen to mark their work, always a coloured gel pen that was green, purple, or pink, and I never placed a big x to indicate what questions were wrong. My strategies for marking varied from student to student. If a student completed a sheet of drill facts and 90% of the answers were

incorrect, I would not indicate all of the wrong answers, as this might discourage the child; rather I would indicate which answers were correct and write a note at the top of the page indicating what needed to be done in order to correct the work. I did notice that some students, especially in grade 3, would write a score on their sheets even though I did not keep track of a numerical value. I would document when the new concept was introduced, if the child was making steady progress, or if the skill was mastered. From the point of mastery, the child was then prepared to move on to a new concept.

### **Extrinsic Rewards: Stickers**

Four of the 6 participants commented that they use stickers in the classroom, and the reasons for doing so varied. Mila adamantly declared that the use of stickers is “totally non-Montessori.” She does use a system of stickers to keep track of the students’ progress with multiplication. She has the older children drill each other in the classroom, and once they know the multiplication facts they add a sticker to the chart to illustrate that it has been memorized. The children are also given a sticker once they know the fact and “that’s the only thing they have a little sticker for.” Mila commented that she does not believe that the sticker is “an incredibly big motivation.” Sheila commented that she uses stickers “once in a while for their spelling tests, it’s very infrequent.” Sheila indicated that children do enjoy the stickers. Alexandria does give her students stickers and indicated that a “sticker is pretty small potatoes. Especially if it [the sticker] is not a consistent reward.” One way that the sticker system was used in Alexandria’s classroom was when she was bringing her younger children from the main floor of the school to the upper floor. The children were told, “Be really quiet so you get a stamp.” Alexandria explained that the sticker on the hand “wasn’t really anything worthwhile, but it was part

of the process of going to the library.” Theresa indicated that there are children “that need a sticker.” She uses a system of stickers for organizing the cultural work (projects) in her classroom. The stickers are used as an organizational tool. Once the children have completed a component of the project, they place a sticker next to the category that has been completed on the chart paper. Teresa found that the students “were losing track, because we have all these projects on the go and I don’t think it was intentional that they weren’t completing them on time.” The stickers on the chart paper made it “easier for the students to conceptualize in their mind that this is what I have to do.” The chart paper is posted on a wall, and students can determine how much work they have left until the project is complete. Teresa emphasized that the sticker is “not a reward,” it is simply used as a tracking and organizing system.

### **Tales from My Montessori Experience**

I recall in Montessori training we were told that stickers are a non-Montessori tool, and I did not use them consistently with my elementary students. I did however use stickers for the spelling “tests” that were every Friday. The students were not graded on the spelling tests, but the work was corrected, and if the students made errors with the spelling of the words or using the words in a sentence, they were asked to rewrite the corrections three times. If the students made 1 error or 10 errors they all received a sticker. They actually looked forward to opening their spelling books after a test as the stickers were always different; some were scratch and sniff, sports, theme stickers, and animals. The sticker was not used as a tangible reward. Everyone in the classroom received a sticker in their notebook regardless of 1 or 10 spelling errors. The animal stickers had the species names written, thus serving as an educational tool.

### **Children With Learning Exceptionalities**

Alexandria, Mila, and Sheila said that they have used stickers with students with learning exceptionalities. Mila suggested that one child in her classroom who had a learning exceptionality (attention deficit disorder) was assigned to a full-time tutor who assisted the child throughout the day. If the tutor was unavailable, she would “have to encourage her with, today is Friday and its snack day at the end of the day, and if you can get this finished then you’ll be able to have your snack.” The student could not complete any work on her own, “she couldn’t do any independent work.” Mila stressed that the child needed the extra boost “that would get her going.” Sheila commented that she understands how incentives might be needed “for some [students] that are struggling,” but she stressed that “it [the reward] would take away from the child doing more, being more creative.” The rewards diminish the task. Alexandria pointed out that she did not “bring in a lot of rewards” but that she occasionally had children “who had to do a sticker system or a mark system.” The example that she gave was “if you get five happy face stickers during the week, at the end of the week you get to do something.” Alexandria suggested that she “never used it as a reward.”

This usage may cause some confusion, as it can be interpreted as a reward. The extra incentive that is given to the child if the goals are achieved throughout the week is a reward for having completed the task. Alexandria commented that this was a particular special needs child where “I had to get rid of some poor behavior.” The reward, as indicated previously, was extra work in science or extra gym class. An extra gym class was also awarded to the class when they were having bad days “so it wasn’t a reward; it

was this class isn't working today, we are going to the gym." Alexandria indicated that the extra time is "not a punishment, it's not even a reward."

### **Tales from My Montessori Experience**

Extrinsic rewards is a term that is difficult to assign a definition. The definition given by Kohn (1993) for extrinsic rewards is "a desired object or event made conditional on having fulfilled some criterion: only if you do this will you get that" (p. 53).

Alexandria indicates that she does not believe that the extra gym time or science work is a reward; however the children had to have achieved the appropriate number of happy faces in order to receive something extra at the end of the week. Kohn lists items that are seen as tangible extrinsic rewards, and stickers and extra recess/gym time are listed under this heading. Children with special needs are "subjected to a relentless regimen of Skinnerian manipulation, complete with elaborate charts, point systems and reinforcement schedules" (p. 153). I have had the opportunity to work with students with learning exceptionalities, and managing control is a key component and the goal is to have the students work to their full potential. Unfortunately, in many instances children with learning disabilities are being treated and trained "as if they are pets...and the educators who trained them fail to appreciate the difference between a structured environment and a controlling one" (p. 155). These reasons for the use of extrinsic rewards are perhaps what is occurring in Montessori classrooms, as indicated by Alexandria, Mila, and Sheila.

### **A Little Something Extra**

Only one of the participants, Teresa, suggested that she used other tools in her classroom. She implemented a marble jar that is used by the whole class to control the

behavior in the classroom. The students begin the week with a full jar of marbles, and Teresa explained that if the children “are doing well, when they’re keeping their voices down, they’re working properly,” the marbles stay in the jar. The marbles are removed from the jar “if they are not behaving properly at lunch time, if I am not there...then I will remove a handful of marbles.” Teresa indicated, if the children do something during the week that is “really nice, I will top the jar, so at the end of the Friday ...they get to have a little extra recess at the end.” Teresa also implemented certificates in her classroom. She indicated that she does not use rewards specifically for Montessori teaching but for “things like group work that I don’t think my Montessori education addressed very well...more group work and acceptance like discipline... the more social aspects of school.” When the students are assigned in groups and are working in pods, children are told that they must work well together and “if they do a really good job, at the end of the week I will give them a certificate.” The certificate indicates that all members of the group “worked really well, you didn’t argue, you followed all of the rules,” and if this is accomplished the certificate is given to the group.

### **Tales from My Montessori Experience**

I also implemented the marble jar my first year teaching. I used the jar as an incentive; if the students were on task I would spontaneously add marbles to the jar. However, I did not remove marbles from the jar if the students were off task as I thought this would diminish the students’ spirit after they had worked diligently to fill the jar. The students would check the jar on a regular basis to determine how many more marbles they thought we needed to fill it to the top. Removing marbles from the jar would have a strong impact if the behaviour was far beyond acceptable. Once the jar was full, as a

class we would decide how we wanted to celebrate our accomplishments. Suggestions from the students ranged from movies, sliding parties in the winter, and a game day during a Friday afternoon. As a class we voted to determine the celebration, emptied the marble jar, and the cycle began again.

### **How the Findings Relate to Montessori Education**

The purpose of my study was to determine how students in the Montessori classroom are motivated. Throughout the interviews it became evident that Montessori educators use a variety of strategies to keep children on task, both intrinsic and extrinsic rewards. I noted that 5 of the 6 educators believed that they did not use a system of rewards in the classroom; but as the discussion progressed it became apparent that some extrinsic methods were introduced into the teaching environment. The concept of stickers is one example where the participants commented that they use stickers but their use is infrequent or as, Mila commented, “is not an incredibly big motivator.” It seemed obvious that each of the participants had the students’ best interest at heart and wanted to find appropriate means to inspire and motivate the children in the classroom. Participants talked about various strategies that they deemed useful in the classroom, such as free choice, which they felt fostered independence and motivation. Educators’ concerns were centered on the development of the child in a positive learning environment. Motivation in the classroom, as discussed by the participants, correlated with the current research (Brophy, 1998; Hargrove, 2005; Kohn, 1995; Lepper, Greene & Nisbett, 1973; McCoach & Siegle, 2005; Montessori, 1967; Newby, 1991) such that children need to be given freedom to explore and that the overuse of extrinsic rewards takes away from the pleasure of completing work.



The philosophy of Montessori education is centered on the concept that, combines freedom with responsibility, a more active role for the children in their own learning, high standards of academic excellence, social awareness and moral development and a vision of humanity and its accomplishments that inspires children to take their place in their communities, with the time comes, as responsible contributing adults. (Lillard, 1996, p. XXI).

Montessori discovered that it was freedom of choice in the classroom that was missing from the traditional classroom setting. Participants in my research generally agreed that the classroom should be a free working environment and that the lessons should be centered on practical ideas that the children can apply to everyday life. From the literature reviewed, the opinions of the participants, and the Montessori philosophy of education, it appears that this freedom does intrinsically help motivate the children and keep them on task at least in the classroom of my participants.

### **Tales from My Montessori Experience**

During my experience in a Montessori classroom environment, I noticed that providing freedom of choice, within certain parameters, encouraged the students intrinsically to begin and complete a task. The completion of the Nile River project is an example. The students were assigned a research project, the required criteria, and were given flexibility to study any aspect of the Nile River. The students could present findings in a typed report, on a poster board with drawings, in a video, or in a skit. This method of completing a project was tailored to meet individual creative needs and allowed students who were artistic the flexibility to develop and present their work in an alternative manner. Similar teaching methods are done in the traditional classroom; however theme

projects are a major assessment in the Montessori classroom and are ongoing throughout the year. Montessori (1967) contends that the teacher should be the guide in the classroom, yet with judicious flexibility allow the children to explore. Providing a student with an outline of the research project as the guide, freedom remains their choice for completion of the assignment. This type of environment does occur in the traditional setting as well; however in my experience free choice is done on a more regular basis in the Montessori classroom. This does not mean that it is a free-for-all, rather the students have criteria to fulfill and must meet the expectations and curriculum of the Montessori program.

### **The Whole Child**

The essence of Montessori education is to meet the needs of the various learners in the classroom and 3 of the 6 participants touched upon this theme. Montessori described the role of the teacher as that of a guide who “neither urges a child onward nor holds him back, being satisfied that she has fulfilled her task when she has guaranteed this precious traveler, the child, that he is on the right road” (Montessori, 1967, p. 160). Teaching a child at the appropriate level fosters motivation to work and complete assignments. If the assignment is too difficult, the child can become discouraged and if the task is not challenging enough, the child can become bored. It is the role of the educator to find the appropriate work level for each child in the classroom. According to Maria Montessori’s philosophy of education (1966), the traditional Montessori classroom setting should be with three different age levels in which older children assist younger children, with the younger children looking up to the older children and learning from their example. Not all Montessori schools today are structured strictly along the

guidelines of Maria Montessori, and in part that may be due to numbers, ratios, staffing, and classroom sizes. Meeting the needs of the various learners in the classroom can be easily accommodated with the three-grade split, as the weaker students can work in a team with the younger students, and younger children with learning exceptionalities can work with older children if they need to be challenged. The three-grade split encourages children to work together at their academic level and thus may produce confident, self-motivated, hardworking students with high self-esteem and the will to work. Commonly, there is little frustration, as children are working at an appropriate academic level that ensures success. Children are given the opportunity to help each other and “individual children’s needs are considered and strengths and motivations utilized” (Loeffler, 2004, p.27). Those students who have strong mathematical skills can help their peers, and students who are artistic can lend a hand to someone in need (Loeffler).

### **Spontaneity Leads the Way**

Daily agendas were discussed by 3 of the educators, and they all agreed agenda use took away from the internal drive and interest of the children. One of the participants commented that an agenda was needed at times to keep children who are easily misguided on task. Montessori believed that the “rules must be just those that are necessary and sufficient to maintain order and ensure progress” (Montessori, 1994, p. 73). The rules are that Math must be completed and the children have the choice of what time of day to work on Math, and this choice maintains order and progress in the classroom. Throughout the readings of Montessori education, Montessori stressed the importance of freedom in the classroom and how this freedom eliminates many behavioral problems and improves discipline in the classroom. There may be a problem

with self-choice once the students move from the Montessori setting into the traditional system, where subject time is scheduled and is consistent throughout the day. It is human nature for the students to face the challenges of completing difficult work in the afternoon that should be done in the morning, such as mathematics or language activities.

### **The Peace Corner**

Four of the 6 participants discussed discipline in the classroom, and the opinions of the participants varied. Montessori believed that the “answer lay in obtaining discipline by giving freedom” (Montessori, 1995, p. 202). Montessori established a working environment in which children could grow and develop, and an educator provided those opportunities. Only one of the participants touched upon this theory. Sheila believes the way the classroom is constructed allows the children to develop and she described her students as having a real “love for the work.” The other 3 participants described discipline in other terms, more along the lines of consequences. Three participants stated that they kept the children in from recess or after school to have them complete unfinished work. Montessori does agree that children need to be isolated if they are behaving inappropriately, and from her experiences, the “isolation always succeeded in calming the child” (Montessori, 1967, p. 60). The only difference is a Montessori child would be placed at a table in the classroom that was isolated from the other children in the room. The child would observe the behaviors of the other children and learn from observation what behavior is acceptable. Three participants described the same example of the child being kept in while the students are out at recess. Alexandria mentioned in a conversation that she thought fondly of the peace corner and encouraged her staff to use this strategy in their classrooms. The peace corner was placed in a serene part of the

room; the children could sit in this area if they needed a minute to calm down or to take a time out. The children could go to this corner at their leisure. The table in the peace corner was adorned with a flower, and the children could also bring in additional material of their choice to add to the peace table.

### **Do Montessori Teachers Use Intrinsic or Extrinsic Motivation?**

Intrinsic and extrinsic motivation in the classroom varied from one participant to the next. In Montessori's view and in her time in the classroom, she did not use any system of rewards. Montessori did not believe in the use of extrinsic motivation and believed that this "concept does not encourage interior development" (Montessori, 1994, p. 6). The participants' use of rewards varied from words of encouragement, praise, comments in notebooks, to marble jars and certificates. In Montessori's classroom there were "no threats, no rewards, no punishments" (Montessori, 1994, p. 263). My participants did comment that when a reward was introduced children began to work for the reward and not for the pure joy of the work. Montessori believed that Montessori classrooms are environments established and "are dedicated to the defense of spontaneity, which aim at setting the children free, prizes, and punishments obviously have no place" (Montessori, 1995, p. 245). The use of extrinsic rewards and punishments in her eyes "only offends the freedom of the spirit" (p. 245) and has no place in the classroom. Children are exposed to the wonders of the world via television and the Internet, and at times it is hard to compete with these extras that they have at home. Participants did indicate that they write comments on children's work and do suggest where improvements need to be made. In her literature, Montessori agrees with this concept somewhat, but correcting has to be done in a manner that encourages the child and directs

him/her. The use of check-marks and “crosses made by the teacher on the child’s written work, all her scoldings, only have a lowering effect on his energies and interests” (Montessori, 1995, p. 245). Montessori concluded that development “and rectification can only come about when the child practices voluntarily for a long time” (1995, p. 246). Montessori classrooms are established in such a way that an educator can sit with a child one on one and assist them with their work, and redirection can be done verbally. As suggested by Montessori (1966), it is the role of the educator to provide the material and opportunities for the children to grow and develop into lifelong learners interested in school. We must take the personal interests of the children into account and try to include lessons that stimulate all of the senses.

## **CHAPTER FIVE: RESULTS AND CONCLUSIONS**

### **Preamble**

The purpose of my research was to study the motivation for learning in the Montessori classroom. My research determined the techniques used by these 6 Montessori educators to motivate students in grade 1-3 classrooms. Throughout this last chapter I will use the literature reviewed and comment on any similarities and differences outlined by Montessori participants I interviewed. The Maria Montessori philosophy of teaching clearly states that the teacher is the one who is to prepare the teaching environment in such a way that the child will flourish and grow into an independent, self-directed child.

### **Choice Is Essential for Student Success**

As suggested by Kohn(1999) and Montessori(1995) freedom and choice in the classroom are advocated for classroom success (students on task and working to their full potential) and to increase student motivation. The 6 participants in the three schools of my study agreed that freedom of choice in the classroom was an important part of their students' development, and this freedom works hand in hand with intrinsic, that is, internal motivation. The freedom as described throughout this thesis was handled with teacher-inspired boundaries, and children were not given total free rein in the classroom. My participants all believed that some freedom is necessary in the Montessori environment but argued that there must be set parameters and guidelines to follow in order for the classroom to run smoothly and for the children to work and learn successfully and appropriately. In my opinion, the underlying goal is always to create an

educational environment to motivate and encourage students to reach their optimal functioning level.

Initially the use of tangible, extrinsic rewards in the classroom was a concept that all of the 6 participants indicated they did not use to keep the children on task. As the interviews progressed, however, it became evident that a variety of extrinsic strategies such as praise, comments, stickers, and the occasional grade, numerical or letter, were indeed used in five of the six classrooms. Furthermore it was clear throughout the interviews that the participants do not see praise or comments as a type of extrinsic reward. As suggested by Kohn (1999), there are people who do not think praise is a type of extrinsic reward as it is a part of our society and something we do quite naturally. The participants understand that extrinsic motivation generally serves as a temporary motivator and can have at first a positive, then a negative effect on the child's inner motivation if overused. I noted that only 1 of the participants adhered closely to the guidelines suggested by Maria Montessori in regards to praise, grades, and motivation. She allowed the materials in the lessons and the classroom environment to intrinsically motivate the child, as Montessori sought to do when she began the first Casa dei Bambini (Children's House) in 1907.

The need to implement some extrinsic rewards, such as grades, was noted by one of the participants, and she believed that it was partly due to pressure from the home life, perhaps the environment, and even the more common traditional school system. Children are not exposed to a grade system in a Montessori school, yet continue to ask for grades on their math or spelling work. One of the participants commented that she believes there is a high probability that the parents, who themselves are products of traditional



education, are grading the children at home when studying for spelling tests or math review, and this then translates to classroom; that's children asking for marks in the classroom. Montessori teachers are taught to think along the same lines as Kohn (1999), that "grades in particular undermine intrinsic motivation and learning" (p. 201). The grade itself can vary from teacher, to teacher and one piece of work given to one teacher can be scored with an A while another teacher may score that same paper much lower. Even though a rubric is used to set the grade, there are gray areas, and one educator might score with a 4, which relates to an A, and the other with a 3, which relates to a B. All participants did not grade students unless the children asked. Participants shared the same thoughts as much of the information gathered in the literature review (Freed & Parsons, 1997; Kohn; Montessori, 1995) that children become fixed on the grade and their performance and the joy of completing a project or an assignment is overtaken by the thought of achieving an A+. None of the educators commonly grade work and when the students asked if they could have a grade, the students usually graded themselves.

The types of tangible and intangible motivators used among the participants were similar, with the exception of both the marble jar and certificates that one of the participants introduced in her classroom. The majority of motivating factors were verbal praise, stickers, and written comments on the students' work. My participants believed that praise and kind words were encouraging for the children, but if overused, were not as meaningful and did nothing to motivate the children. One of the participants had a lengthy explanation concerning why she introduced the idea of extrinsic rewards, such as praise and stickers, into the classroom. The issue of competing with the outside world was one of her reasons, and she believed it is too difficult to compete with what the

children may be exposed to at home and in the outside world. This particular school is located in an affluent area, and the children seemingly do not lack material needs. The use of the comments and stickers was cited as one way to keep the children task oriented when they would prefer to be playing PS3 or Game Boy.

A review of the types of tangible and intangible motivation utilized in the classroom indicates the majority of the interviewed participants utilize stickers and comments/praise. According to Covington (2000), praise has a detrimental effect on a student's motivation and grades also decrease the inner motivation of a child. The participants were all consistent in commenting that children at times are in need of a little extra push to get the task done. Occasional praise serves as a motivator, and children continue to work hard to complete the task and to meet the needs of the educator. Participants' views of intrinsic and extrinsic rewards and how they motivate their children in the classroom illustrated a fairly clear picture of how their classrooms are managed. Freedom was deemed essential for all classrooms, and freedom of choice continues to play an important part in the teaching environment. Ironically, it is also the free choice of the educators to use motivators in the classroom, be it stickers, grades, marble jars, praise, or the work itself.

### **Recommendations for Further Study**

The results of this study suggest several areas for future research. One recommendation is to repeat the study with a larger sample size and include many more Montessori schools in the eastern, western, and northern areas of Ontario.. Another suggestion might be to visit several classrooms and observe practices being used, as well as interviewing the students about their ideas concerning the Montessori approach.

Children of the Montessori experience could be asked several questions centered on the theme of rewards and motivation.

1. Do you believe in receiving stickers and grades?
2. Do you enjoy receiving them? Why/why not?
3. Do you enjoy the Montessori experience and why? This could be asked to students who have attended school in both systems.
4. How do you feel when you know you are working for a pizza party or marble party?
5. Do you have to be reminded several times to stay on task and complete your work?
6. Why do you feel you have to be reminded several times throughout the day to complete your work?

These questions might give further insight into how the children are feeling about school, motivation, and tangible/intangible rewards.

Another area to investigate could be the public teaching sector to determine if educators are using similar teaching strategies and why the teachers feel the need to implement these practices. We could compare the traditional schooling system with the Montessori system through interviews with educators of both pathways and determine if similar practices are used, if the children stay on task in one environment in comparison to another, and investigate discipline issues in both environments. My literature review outlined some similarities and differences of the traditional schooling system and Montessori. The participants in this study demonstrated a keen interest to provide an

educational teaching environment to motivate/encourage students to function at their optimal level.

### **My Current Teaching Experience**

In my present situation I am teaching in the traditional schooling system, and I have observed firsthand the lack of inner motivation and drive in many of my students. When I prepare an outstanding lesson that is interactive and touches upon the various learning styles of my learners, my students are more engaged and take part in the activity. I have noticed that when I assign paper work, a third of the class will ask if it is going to be graded, and if I respond with a no, they do not complete the work. Through my observations I notice that several students are driven by marks and extrinsic rewards to the extent that I have had to create interesting lessons and activities to keep the students on task and to minimize behaviour issues. It is, however, an educator's duty to keep the lesson fresh and creative.

### **Summary and Conclusion**

My research study afforded an opportunity to investigate how six Montessori-trained educators in three schools utilize intrinsic and extrinsic rewards to motivate their students. Although the findings cannot be generalized to all Montessori schools, nor can it be definitively applied to all teachers, the specific styles implemented by the various teachers in this study suggest that the methods used in the classroom work as motivational factors. Throughout my research it was evident that the six participants were familiar with the Montessori teaching philosophy and it clearly had a galvanizing effect on how these methods are applied in the classroom.

A review of the literature pertinent to intrinsic and extrinsic motivation provided a base framework of knowledge for this study and allowed me to draw certain conclusions regarding the use of various motivational strategies. The Montessori school-based study revealed the following:

1. The 6 participants endorse the concept that freedom of choice is important and support the notion that the role of the educator is to create an environment that motivates and encourages students to reach their optimal functioning level. They also have a vested interest in the implementation of various motivational factors that enrich the learning experience of all students.
2. Five of the six participants periodically utilize some form of extrinsic rewards at various times, but only as a temporary buttress to inner motivation. It appears evident these teachers see the need and use for rewards as a motivational tool, yet also believe that these strategies work best when integrated with various other methods.
3. Only one participant adhered carefully to the Montessori guidelines in respect to praise, grades, and rewards. None of the 6 participants formally grade the students' work. Although spelling tests are given weekly in each of the classrooms, none are evaluated, nor are marks awarded.

During this research study I found that only 1 of the 6 participants uses intrinsic motivation exclusively to help the children remain on task and interested in their work. I think that this teacher fully understands the goals of the Montessori philosophy and believes in staying true to Montessori teachings. Montessori made it very clear in her writings (1966) and lectures that students do not need to be given extrinsic rewards in order to be motivated to complete assigned tasks, the work itself and the individuals

feelings of accomplishment should be the reward. As noted, five of the six participants use both intrinsic motivation and extrinsic rewards to motivate the students. It is evident that freedom of choice and allowing children to explore for themselves is a unique characteristic of all classrooms; however this is a hallmark of the everyday learning and teaching in a Montessori environment. The traditional school appears generally more structured, and consequently students may have fewer and more limiting opportunities to exercise the freedom of choice on a scale experienced in the Montessori environment.

The majority of the participants utilize stickers or comments and praise as methods of reward for the students that at times vary from the intended Montessori philosophy. Three of the participants used a reward system, such as stickers, for students with learning exceptionalities to facilitate and encourage learning. It may be that certain students needed additional motivational methods to assist them in completing the work and this was one manner in which the students were helped to achieve that goal.

There are some significant and perhaps fundamental differences between a private Montessori school and a public traditional school, yet in some measure, as in the use of extrinsic motivation, they appear in certain ways similar. These similarities seem to be in the area of practical application by the teachers when implementing various strategies for motivating the students. It also appears that in the area of students with exceptionalities, there was some variance in the use of motivational strategies that complied more with the public school environment than the true Montessori philosophy. Further research and study seem warranted and necessary in order to determine the ultimate benefits of the Montessori teaching philosophy as compared with the traditional school system. Perhaps one direction for the next phase of study could concentrate on how much the Montessori

classroom has been adapted by practicing teachers in order to address some of the student challenges requiring various motivational strategies, aside from the ones implemented in today's Montessori system.

This type of questioning may examine more specifically how closely aligned the Montessori philosophy is to the current practice in the classroom. Attaining information that could arise from this research seems imperative if we are to maximize educational opportunities and encourage our students to function at optimal levels. It may also shed light on consistencies and inconsistencies in practical application in various Montessori schools to uncover how closely the true philosophy is being applied. These questions, if answered, may assist our students in applying their skills and achieving their best.

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## Appendix A



### SIGNED CONSENT FORM

#### CONSENT TO PARTICIPATE IN RESEARCH

##### **Intrinsic and Extrinsic Motivation in Montessori Schools: Teachers Speak**

**You are asked to participate in a research study conducted by Kristina Rivard Gobbo from the Masters of Education Program at Nipissing University. The results from the project will be used in the master's thesis.**

**If you have any questions or concerns about the research, please feel free to contact:**

**Kristina Rivard Gobbo w: 705 673-2211 h: 705 523-1803 email**

**kristina\_rivard@hotmail.com**

**Dr. Heather Rintoul w: 705 474-3461 ext.4448 hmrintoul@aol.com heather@nipissingu.ca**

- **PURPOSE OF THE STUDY**

The rationale of the study is to investigate the outcome of utilizing intrinsic motivation and external rewards in controlling behaviour and motivating students in a Montessori environment. This research will examine and suggest the significant benefits and impacts of the utilization of intrinsic motivation and external motivation in a Montessori School environment and what philosophies of Montessori education are followed at various schools.

- **PROCEDURES**

If you volunteer to participate in this study, we ask you to do the following things:

Participate in a one hour interview with the researcher. The interview will be taped and you will receive a copy of the transcribed data. Once you have received a copy of the interview you will have the opportunity to make changes or alter any of your responses. If there are changes to be made from your responses you will receive an additional copy of your interview. The data collected will be used by the interviewee and will not be given to any other individuals other than the thesis supervisor.

- **POTENTIAL RISKS AND DISCOMFORTS**

The interview will be conducted one on one with the interviewee. Please be assured that your comments will be held in confidence and that you will have the opportunity to respond to the questions at your own pace.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The data gathered may benefit the Montessori community at large, educators, principals and first year teachers of the Montessori system. The Montessori community and other educators who are interested in motivating children with the use of external or internal motivation will also gain insight from the study. Part of the rationale for doing the study is to discover how the children are motivated in a system where there is little grading. There is need for published Montessori articles and finding that will inspire and support curious Montessori educators.

- **PAYMENT FOR PARTICIPATION**

The subjects will not receive payment.

- **CONFIDENTIALITY**

**Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Your participation will remain confidential and the participants will have anonymous names. The taped information will remain in the hands of the interviewee and thesis advisor will be privy to the information. The disclosure of any information will be given to the thesis supervisor upon request to ensure the data was transcribed properly and was interpreted properly. The tapes will be used solely for educational purposes. The subjects will have the right to review/edit the tapes upon request.**

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- **PARTICIPATION AND WITHDRAWAL**

**You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. The investigator may terminate your involvement in the participant does not attend the scheduled interview, without prior notice.**

- **RIGHTS OF RESEARCH SUBJECTS**

**You may withdraw your consent at any time and discontinue participation without penalty. This study has been reviewed and received ethics clearance through Nipissing University's Research Ethics Committee. If you have questions regarding your rights as a research subject, contact:**

**Research Ethics Co-ordinator**

**Telephone: 705-474-3461, #**

**4558**

**Nipissing University**

**North Bay, Ontario**

**P1B 8L7**

- **SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE**

**I understand the information provided for the study The Use of Rewards in Montessori Schools as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.**

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**Name of Research Subject (please print)**

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**Signature of Research Subject**

**Date**

- **SIGNATURE OF INVESTIGATOR**

**In my judgement, the subject is voluntarily and knowingly giving informed consent to participate in this research study.**

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**Signature of Investigator**

**Date**

## **Appendix B**

### **Interview Questions**

1. Could you give a little information about yourself and the various schools that you have taught?
2. Could you outline what you believe is the Montessori philosophy?
3. What is your Montessori teaching experience?
4. What is your understanding of extrinsic motivation?
5. What is your understanding of intrinsic motivation?
6. How do you motivate children in the classroom? Can you provide examples?
7. Do you use a system of extrinsic rewards in your classroom? If no, why not? If yes, expand.
8. Do you believe that the use of external rewards such as praise or marks can motivate a child to complete work?

9. Does your principal promote a grading system in your school? If no, could you explain the process you utilize.
  
10. How are student achievements recorded?