

5-2018

# Improving Teacher-Efficacy

Gillian K. Jones  
*St. Catherine University*

Follow this and additional works at: <https://sophia.stkate.edu/maed>

 Part of the [Early Childhood Education Commons](#), and the [Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons](#)

---

## Recommended Citation

Jones, Gillian K.. (2018). Improving Teacher-Efficacy. Retrieved from Sophia, the St. Catherine University repository website:  
<https://sophia.stkate.edu/maed/262>

This Action Research Project is brought to you for free and open access by the Education at SOPHIA. It has been accepted for inclusion in Masters of Arts in Education Action Research Papers by an authorized administrator of SOPHIA. For more information, please contact [amshaw@stkate.edu](mailto:amshaw@stkate.edu).

Improving Teacher-Efficacy

Submitted on May, 16<sup>th</sup> 2018

in fulfillment of final requirements for the MAED degree

Gillian Jones

Saint Catherine University

St. Paul, Minnesota

### Abstract

The study was designed to investigate the effects of daily readings on teacher-efficacy within a Montessori environment. This self-study used daily Montessori readings, recording of mastery experiences, scales of accomplishments, surveys of confidence and daily reflections as a way to increase teacher-efficacy over the course of five weeks. I conducted the research in two different Montessori schools. The study highlighted teacher-efficacy in working with children and in working to build a new school. Both schools were located in the Midwest. The first portion of the study was conducted in an established Montessori classroom with 28 children ranging from 2.5-6. The second half of the study was conducted in a newly built Montessori environment. The participant noted that confidence in her abilities significantly grew through these efforts to increase teacher-efficacy.

*Key words:* teacher-efficacy, Montessori, confidence, self-efficacy

## Improving Teacher Efficacy

The topic of efficacy can be explored in numerous contexts including; self, work, athletic, cognitive and teaching. Personally, I thought about teacher-efficacy on a daily basis. After receiving my diploma from Association of Montessori International (AMI), I began working in a Montessori environment full time. Fresh out of the Montessori training, I was feeling hopeful and optimistic about my transformation. Those feelings did not last long. I found myself feeling unaccomplished, defeated and confused. I questioned my knowledge of the Montessori method and my skills as a teacher. Feeling incompetent ultimately affected my interactions with the children and adults around me.

As most freshly trained Montessorians are, I was feeling optimistic and confident in my knowledge of the method. When I started working as a trained assistant in a Montessori Primary Children's House, the Montessori name for a classroom of 2.5-6 year olds, at a private Montessori school. The adults hired by the school are often untrained and unknowledgeable of the method at all. It became clearer and clearer that the Montessori concepts were becoming diluted and mixed with more traditional ways of teaching. I found it difficult to withhold the values that I knew to be true when many of the adults were struggling to adapt to the method. Because of this, I struggled to identify and remain consistent with what I knew to be true. I began to research confidence and teacher identity that ultimately lead me to teacher-efficacy. In this study, I found the ways to increase teacher-efficacy as a way to improve my feelings of my abilities as a teacher and as a Montessorian.

Dr. Montessori developed the Montessori method with the child at the front. She also conducted research on the development of the adult, often referred to as the spiritual transformation. I wanted to focus my research on becoming a more prepared adult in order to raise my own levels of teacher-efficacy.

## Literature Review

### Self-efficacy

There has been much research on how self-efficacy affects one's ability to achieve a goal. This literature review outlines the importance of teacher-efficacy in the classroom and how to improve it.

Self-efficacy relates to self-perception of one's competence, instead of one's actual competence. The beliefs in a person's own ability to achieve a desired outcome relates to self-efficacy. These beliefs influence how much effort and time is put into pursuits. The beliefs also influence the person's stress or emotions when coping with the failure of a pursuit and how accomplishments are acknowledged (Bandura, 1997). In their study on Teacher Efficacy, Tschannen-Moran, Woolfolk Hoy, and Hoy wrote that we must make a distinction between the perception of our ability and the actual ability to participate or complete certain tasks. "This is an important distinction because people regularly overestimate or underestimate their actual abilities, and these estimations may have consequences for the courses of action they choose to pursue or the effort they exert in those pursuits." (Tschannen-Moran, Hoy & Hoy, 1998. p. 211). Self-efficacy differs from other forms of self-identifying factors like self-esteem or self-confidence because it relates to one's feeling of competence in a certain task. For example, someone may feel inept in cooking but still have high-self esteem. Self-efficacy refers to a specific task that when doing, the person can feel highly efficient at or not. (Tschannen-Moran, Hoy, & Hoy, 1998). A teacher can feel confident in creating successful lesson plans for math but experience levels of low efficacy when it comes to classroom management. The teacher could feel confident as a teacher in some aspects but not the others. Self-efficacy is a perception of appraisal (Cervone, 2000). For example, if a teacher enters a behavior management situation

## Improving Teacher Efficacy

with a child already doubting the outcome, the teacher is more likely to be unsuccessful in that situation. If the teacher feels confident that the outcome will be positive, it is more likely to end successfully. (Cervone, 2000). A person's perception of their ability in completing this task outweighs the actual competence, or talent, when completing it.

Albert Bandura (1997) attributed levels of efficacy to four sources. He describes the ways in which one's self-efficacy is affected, negatively and positively, through: mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states. Mastery experiences are times that a teacher has successfully completed a pursuit, a teacher giving a successful lesson and the children feeling confident in the material presented. Vicarious experiences are created through observation of another person. When a teacher observes a colleague give a successful lesson, she is likely to think that she too can find success in the same way. When a teacher receives a compliment or encouragement from a mentor or colleague they have gained efficacy through verbal persuasion. Physiological and affective states of being, whether it's negative (rapid heart beat) or positive (calm and relaxed), affect the way a person perceives her ability to complete the task at hand.

Mastery experiences are the most beneficial to increasing self-efficacy because they provide the most authentic evidence of success. Bandura found that when people attempt a pursuit and succeed, they are more likely to believe that another attempt at that pursuit will also end in success. People who continually finds success in a certain pursuit develops a higher self-efficacy for that pursuit. They then are more likely to engage in the pursuit for longer periods of time, give it extra effort and attention and persevere in times of adversity. On the other hand, if a person does not succeed in a given pursuit, she is more likely to believe that future attempts will also end in failure (Bandura, 1997).

## Improving Teacher Efficacy

In a study on Montessori teacher-efficacy, Bhatia (2012) found that mastery experiences had that greatest impact on levels of self-efficacy among her participants of teachers undergoing a Montessori training. Knowledge of theory, mentor support, and classroom experience were also contributing factors specific to levels of efficacy for Montessori teachers. Participants with high levels of teacher-efficacy accredited it to teaching experiences prior Montessori, knowledge of theory and training. (Bhatia, 2012). Bhatia found that the second best contributing factor in efficacy among participants was physiological and affective states. Bandura (1997) described physiological and affective states, as how people interpret physical arousals in a given situation. For example, when entering a task if one experiences an increased heart-rate or sweaty palms, she might automatically feel that they are inept at the task.

By conjuring up aversive thoughts about their ineptitude and stress reactions, people can rouse themselves to elevated levels of distress that produce the very dysfunctions they fear. Treatments that eliminate emotional reactions to subjective threats through mastery experiences heighten beliefs in coping efficacy with corresponding improvements in performance. (Bandura, 1997, p. 106).

If a teacher feels confident in giving an accurate presentation, they are more likely to enter the situation with a calm demeanor and have a stronger performance.

Vicarious experiences are those in which a person observes another person completing a task and therefore feels that they too can complete it. For example, many advertisements in weight loss programs use real people to provide evidence that the product works. (Bhatia, 2012). Bandura's final source of self-efficacy is verbal persuasion and comes from verbal approval from peers or mentors. In Bhatia's study, it was found that among the participants the ones with high-

## Improving Teacher Efficacy

levels of teacher efficacy were encouraged to take the Montessori training by mentors whereas the participants with low-efficacy found the training through their research.

### **Teacher-efficacy**

A teacher with a high level of efficacy is more likely to try new techniques in the classroom when traditional ways of teaching are not working. The new techniques might, in particular, be more challenging, require more effort from the students or involve risks. These teachers often employ classroom management techniques that require student autonomy and tend to work more closely with children of lower abilities. High levels of teacher-efficacy lead to change in behavior within the teacher, causing the level of student-efficacy to rise. Self-efficacy influences one's persistence to complete a given task, teachers with high self-efficacy are more likely to not give up on student achievement. Whereas teachers with lower self-efficacy might fail in trying new ways to help students achieve (Ross & Bruce, 2007). If teachers believe that their attempts on student achievement will fail, they will decrease their efforts in finding ways to heighten student's performance. (de la Torre Cruz, 2007).

Not only does teacher-efficacy affect student's academic performance, but also how a teacher exhibits classroom management. Teachers with low-efficacy are more likely to fail in recognizing off-task behavior, favor more teacher-focused lessons and give students the answers instead of waiting for a response (Czernaik, C., Chiarelott, L., 1990). In having high levels of self-efficacy, one is more likely to persist in adversity. For teachers, "greater efficacy leads to greater effort and persistence, which leads to better performance, which in turn leads to greater efficacy" (Tschannen-Moran, Hoy & Hoy, 1998. p. 234).

For many teachers, efficacy also plays a role in teacher commitment. If a teacher feels that they are inept and unable to find success among students, they are more likely to leave the



## Improving Teacher Efficacy

profession early. If teachers feel that they are successful in their career, they are more likely to stay in the profession for a longer time (Chan, Lau, Nie, Lim, Hogan. 2008). When teachers find success in mastery experiences, self-efficacy rises allowing them to have stronger beliefs in their abilities. Research found that teacher-efficacy is most impressionable early on in a teacher's career and difficult to redirect once the teacher has already established themselves in the field (Pfitzner-Eden. 2016). Similar to Bandura's discovery that teacher-efficacy relates to a specific task within the field, he also found that teacher-efficacy and confidence in a specific aspect of the job can increase or decrease as time goes on. Occupational changes, i.e., moving schools, going from pre-service to in-service, new co-workers, can all affect the ways in which the teacher perceives her abilities (Klassen, Chiu. 2011).

Research shows that a person's self-efficacy is a contributing factor to success at a given task. Teacher-efficacy has a somewhat of a trickle-down effect, starting from the teacher herself down to the children she teaches. If a teacher displays low teacher-efficacy she is more likely to leave her job early and stay stagnant in her attempts at student accomplishments. Both of these outcomes affect a student's ability to find success in academics. The research on *why* or *how* efficacy is important to teachers but little on how to increase it, especially in a Montessori environment. It is important for a teacher to recognize her own levels of efficacy and how to effectively raise her beliefs in accomplishing the many tasks she undertakes successfully.

### **Methodology**

For this action research project, I studied the effects of daily Montessori readings on my personal levels of teacher-efficacy. I used two different pre- and post- surveys, daily tally of mastery experiences, twice-daily scale of feelings of accomplishment and daily journaling.

## Improving Teacher Efficacy

My research was split between two different schools, each with a different set of responsibilities. The first half of the research lasted three-weeks and was focused on teacher- efficacy working with children. The second half of the research lasted two weeks and focused on preparing a classroom environment, opening a school and functioning with other AMI - Montessori trained co-workers. Before the intervention, I compiled a list of reading materials to be read during the intervention, all involving the Montessori method. See Appendix A. I created a schedule for each day of readings to manage the topics for both phases of the research. See Appendix B. The first collection involved topics about the prepared adult, concentration, normalization and child development. The second set of readings focused on the prepared environment, fostering intelligence, independence and rituals of Montessori schools..

Based upon the work of Albert Bandura (2006), I created two different surveys. Appendix C and Appendix D. On a scale of 0-100, I recorded my confidence in successfully completing specific tasks. With 0 being cannot do it at all and 100 being certain that it can be done. Survey A is divided into five categories, efficacy to influence decision making, instructional self-efficacy, disciplinary self-efficacy, efficacy to create a positive school climate and efficacy to enlist parental involvement. I took this survey prior to the start of the intervention and again at the end of the first three weeks. Survey B is divided into three categories, efficacy to influence decision making, efficacy to create a positive school climate and efficacy to contribute to the Montessori environment. I took this survey after week three, prior to beginning phase two of the research and at the end of the research. I created a rating scale to monitor my levels of accomplishment throughout the day, once at 12 and once at 4:30. Appendix E. The scale ranged from 0-5 with 0 representing feelings of very unaccomplished and 5 being very accomplished. I developed a tally system to record the amount of times I accomplished a

## Improving Teacher Efficacy

mastery experience throughout the day. At 4:30, I journaled about my daily experience, sometimes going into detail about specific experiences and giving a general overview of my attitudes of teacher-efficacy.

In both phases of the intervention I read a Montessori reading at 7:30 each morning before going into work. Throughout the day I recorded my mastery experiences on a piece paper kept in my pocket. The experiences ranged from observing a child independently repeat a guided behavior lesson, a successful conversation with a parent and a positive tour from prospective family. On my lunch break at 12, I recorded my feelings of accomplishment and again at the end of day at 4:30.

### **Analysis of Data**

I began the project by measuring my levels of teacher efficacy through a self-survey (See Appendix C). I retook this exact survey at the end of Phase 1 in order to determine if changes occurred. Before Phase 2, I took another survey focusing on aspects of the profession outside of being with children (See Appendix D). I took this exact survey at the end of Phase 2. The findings are illustrated in Figure 1 and Figure 2.

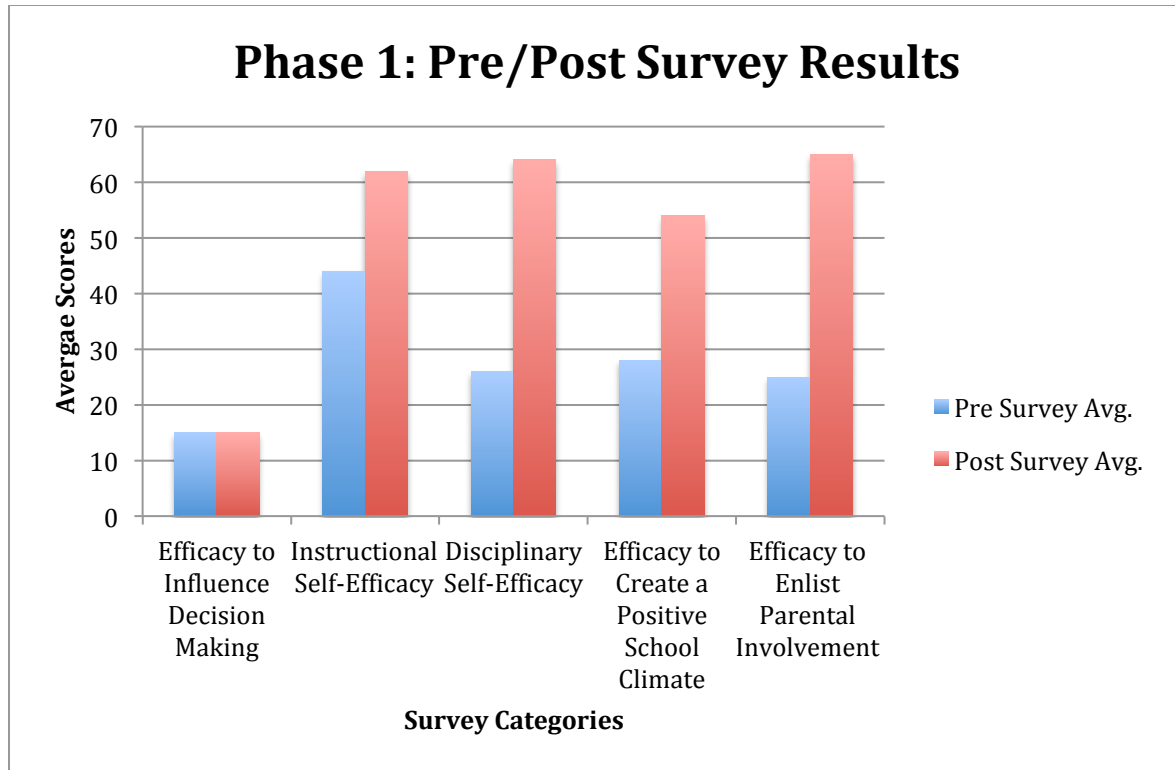


Figure 1. Pre and post survey responses from Phase 1.

The survey taken in Phase 1 had a total of 19 questions broken into five categories, measured by a scale from 0-100. With 0 representing ‘ I cannot do at all’ and 100 being ‘highly certain can do’. I took the average within the categories to demonstrate where my efficacy grew the most. In Phase 1 of the research, my levels of confidence in influence decisions made within the school and classroom remained the same. I was an assistant to a lead guide in a large Montessori school. The heirarchical culture of the school didn’t allow for much influence from employees of my job description. Aside from that category, my confidence levels grew significantly over the course of the research. It’s difficult to determine how or why. Reading before entering the classroom each day reaffirmed my preparedness and knowledge of the Montessori method. Taking note of how many mastery experiences I had each day, highlighted that not all days are as stressful or unaccomplished as I might think.

## Improving Teacher Efficacy

In the beginning of Phase 2, I began a new job. I became the lead guide of a startup Montessori with two fellow trained Montessori guides. For the two weeks detailed in Phase 2, we worked together to define the school's vision, design daily routines, formulate plans for the classroom environment and begin the lengthy material making process. I entered this new job with more optimism and a positive attitude. On the last day of Phase 1, my journal entry described feelings of satisfaction in my overall performance as a teacher. I wrote that I was surprised to see the results of the post-survey. I also wrote that I was "thrilled" to be moving on to a better opportunity. My pre-survey results for Phase 2 already reflected higher confidence in my abilities. This portion of the research would not involve children so the questions compiled in the survey were slightly different. The survey had a total of nine questions broken into three categories. I took the average of the answers from each category. Compared to Phase 1, my confidence in influence decision making was much higher. I entered this portion of the research knowing that I would be one of three to make decisions regarding both the entire school and the individual classroom.

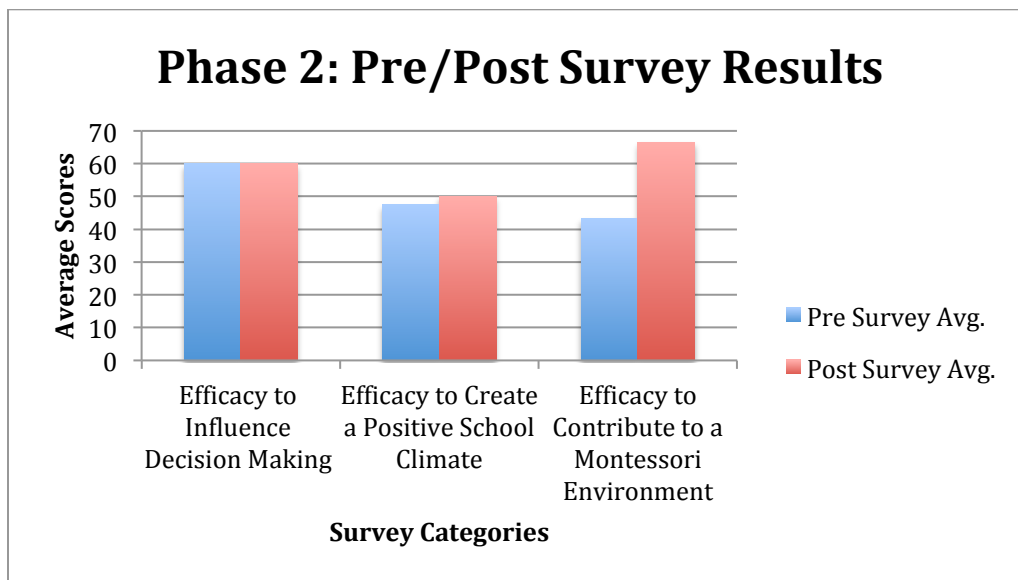
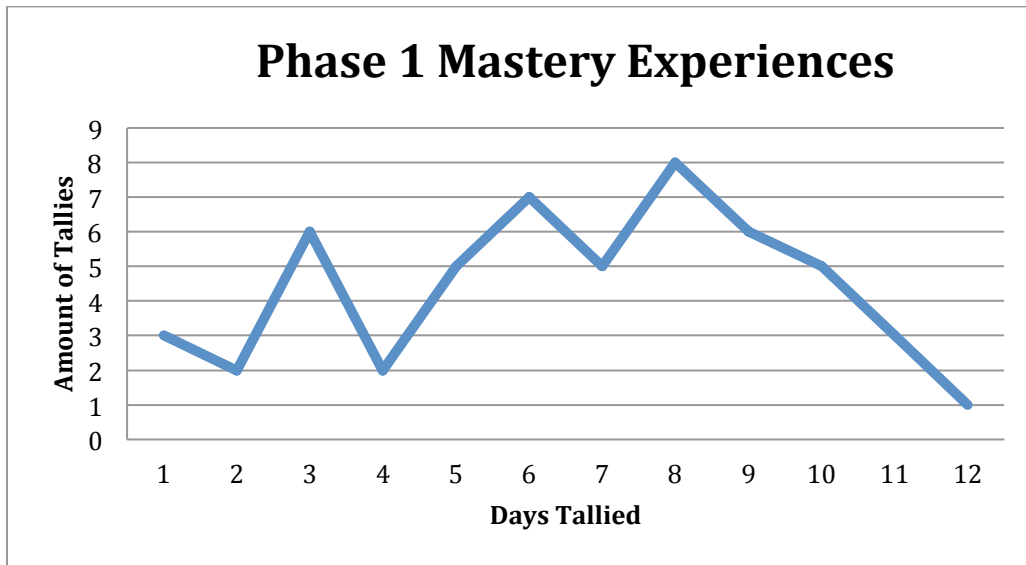


Figure 2. Pre and post survey responses.

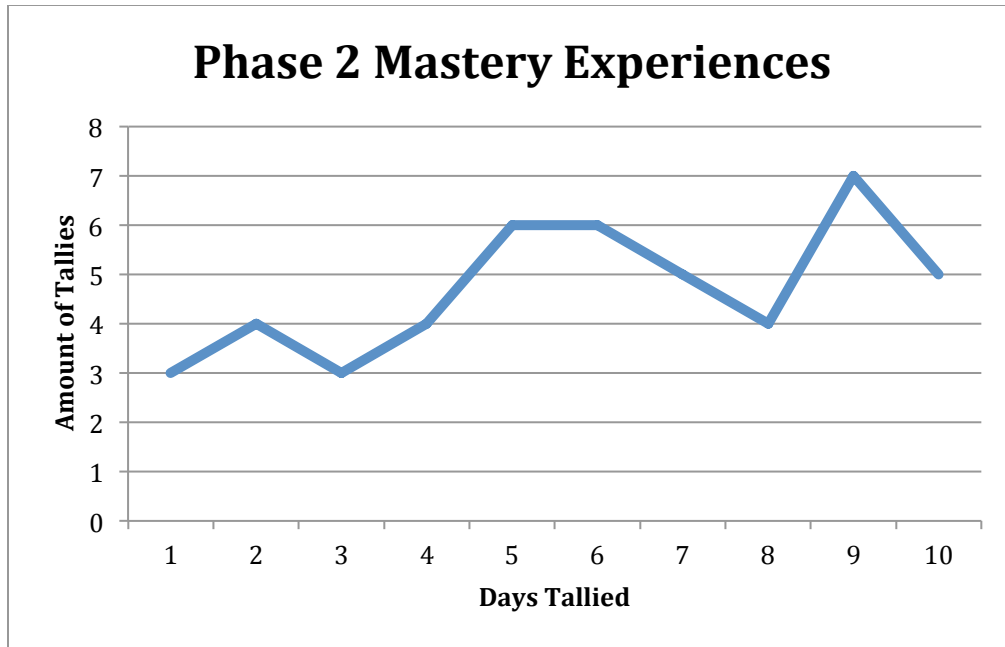
## Improving Teacher Efficacy

During the intervention, I tallied how many mastery experiences I had each day. These tallies are seen in Figures 3 and 4. Phase 1 data was collected for three weeks. With both planned and unexpected school closings, the data was recorded over twelve days. Data was collected for ten days during Phase 2.



*Figure 3. Tallies noting mastery experiences in Phase 1.*

The tallies represented a time that a child responded well to my communication with them, I experienced a moment of accomplishment. As the chart shows, the tallies were somewhat disorganized and varied greatly from day to day. I compared the amount of tallies with the topic of readings and found that on the days I read about themes or topics specific to the method, discipline, silence or social development, I recorded the highest amount of mastery experiences. On those same days (days 6 and 8), I noted in my journals that I felt more patient, aware of the environment as a whole, and aware of the child as a whole. Whereas on days I read specifically about the adult’s role in the environment, the amount of mastery experiences were the lowest. I noted in my journal entries that I felt I wasn’t measuring up to the “correct” prepared teacher written about by Dr. Montessori.



*Figure 4. Tallies noting mastery experiences in Phase 2.*

In Phase 2, I received less critical feedback from outside forces. Unlike Phase 1, I wasn't interacting with children or other adults on a daily basis. The experiences ranged from successful conversations with prospective parents and positive feedback from co-workers. Because I didn't experience direct feedback from either children or adults, the range of tallies is a bit more consistent from day to day. I recorded feelings of accomplishments in my journal of tasks I was able to execute well, especially in designing the layout of the environment and making necessary materials.

Twice daily, I recorded feelings of accomplishment at mid-day and at end of day. On a scale of 0-5, 0 as unaccomplished and 5 as accomplished. These numbers are seen in Figures 5 and 6. During Phase One, my feelings of accomplishments varied from mid-day and end of day. This could possibly be because of the nature of working with children. The noise levels and dynamics of the environment are constantly changing. In Phase Two, my feelings of accomplishments at the end of day were more consistent with the mid-day.

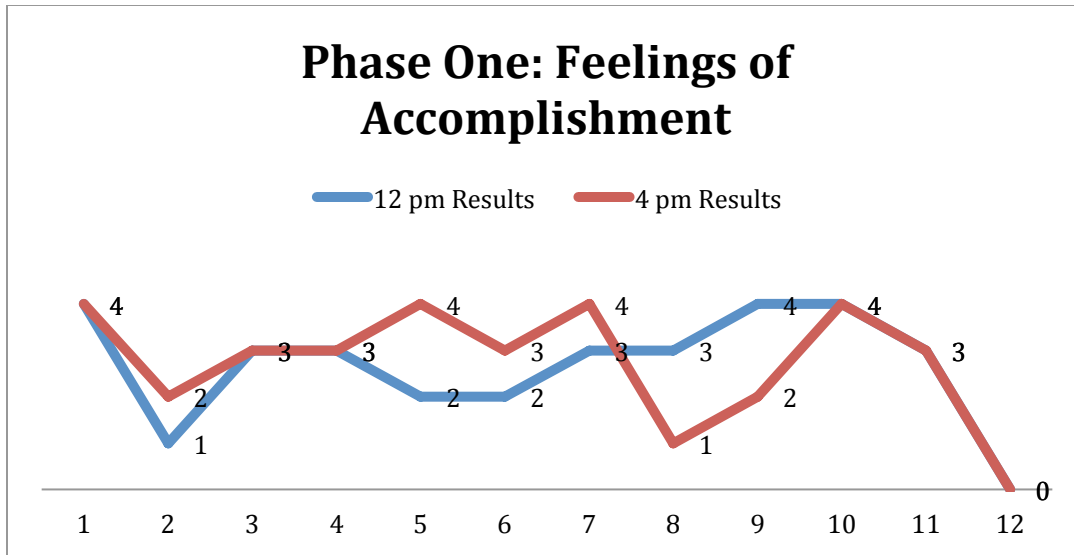


Figure 4. Levels of accomplishments during Phase 1.

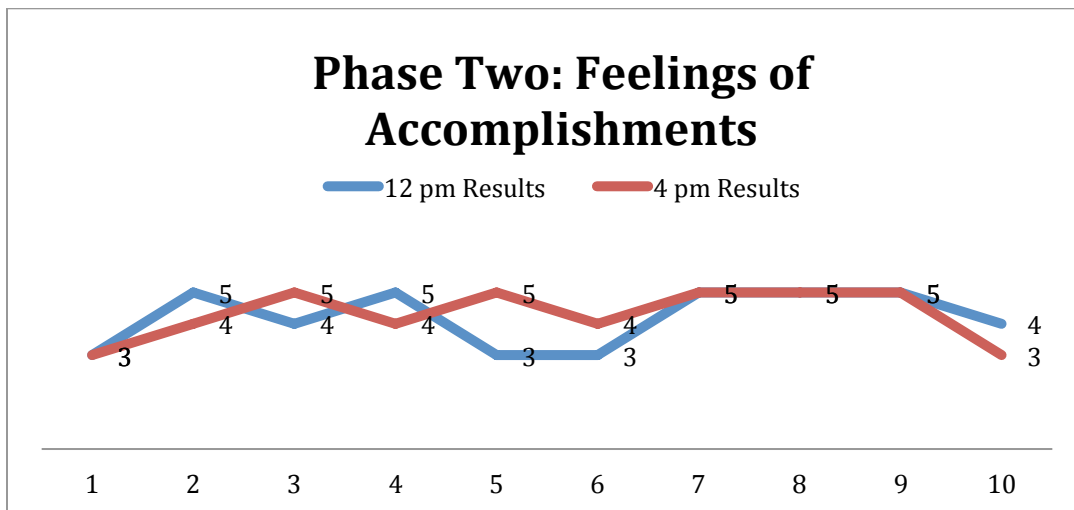


Figure 5. Levels of accomplishments during Phase 2.

### Discussion of Research

#### Impact of the Research

This research explored one possible method to increase teacher-efficacy. Data showed an overall increase in teacher-efficacy over the course of the study. It is difficult to determine what factors led to the increase of confidence. Being reminded of important topics, strategies and values of the Montessori method through daily readings aided my approach in communicating



## Improving Teacher Efficacy

with children, parents and colleagues around me. Seeing the tallies of mastery experiences at the end of each day raised my confidence. Taking time each day to check in with myself and recognize the accomplishments also aided in raising my confidence. I noted in journal entries that being able to recognize feelings of stress helped manage expectations of myself, children I interact with and adults I work with. The feeling of being better at my job decreased stress and anxiety. This research improved my pride and job-satisfaction and decreased the negative feelings I had been experiencing at work.

The results of the research will impact the way I work with children moving forward. Fortunately, all aspects of the research left me with a positive feeling about my career and my abilities as a Montessori guide. The act of reading Montessori material before starting the day was a ritual I looked forward to completing each morning. It was not time consuming and could easily be incorporated into a weekly or daily schedule. Taking note of each accomplishment, positive experience or notable situation within the classroom environment boosted my interactions.

After analyzing the data I collected and reflecting on my personal growth, I began to wonder how long will my new levels of teacher-efficacy last. I have positive feelings about my career and my abilities to complete necessary tasks in order to be successful. But what happens if these feelings begin to fade away?

### **Potential Further Research**

There has already been a plethora of research on teacher-efficacy. Exploring other ways to increase teacher-efficacy, beyond mastery experiences, would bring in more tools to support teacher's attitudes. Bandura believes that self-efficacy is regulated by mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states. It would be

## Improving Teacher Efficacy

interesting to incorporate the other ways to build efficacy into this type of self-research. The research also brings up the question of longevity. Will the high of a successful completion of the research question start to go away? Once my levels of teacher-efficacy has reached a satisfactory high, does it stay there forever?

Incorporating moments to self-reflect is a simple way for other teachers to also gain efficacy. Research shows that teachers with higher efficacy stay in the field longer. Improving teacher-efficacy benefits the individual, children, schools and education as a whole. Teachers with higher efficacy levels are able to invent new ways of staying engaged with the profession and students.

Researching teacher-efficacy was a very humbling experience. I was embarrassed to admit that I was experiencing low-efficacy in my career. Realizing that I share these feelings with others teachers all over the world eased the shame I felt. Prior to participating in this research I experienced self-doubt, high levels of stress, anxiety about my career choice and low teacher-efficacy. The research gave me the opportunity to change how I perceive myself within the profession. Although there will always be room for improvement, I feel more comfortable and confident. Because of this I feel better suited to stay in the profession longer and with a better outlook on the teaching profession in general.

References

- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman and Company.
- Bhatia, P. (2012). Mind Over Matter: Contributing Factors to Self-Efficacy in Montessori Teachers. (Doctoral dissertation). ProQuest LLC.
- Cervone, D. (2000). Thinking about Self-Efficacy. *Behavior Modification*, vol. 24, (1): p. 30-56.
- Czernaik, C., Chiarelott, L. (1990). Teacher Education for Effective Science Instruction--A Social Cognitive Perspective. *The Journal of Teacher Education*. vol. 41, (1), p. 49-58.
- de la Torre Cruz, M. (2007). Comparative Analysis of Expectancies of Efficacy in In-Service and Prospective Teachers. *Teaching and Teacher Education*. vol. 23, (5), p. 641-652.
- Klassen, R., Chiu, M. (2011). The Occupational Commitment and Intention to Quit of Practicing and Pre-Service Teachers: Influence of Self-Efficacy, Job Stress and Teaching Context. *Contemporary Educational Psychology*. vol. 36, p. 114-129.
- Pfitzner-Eden, F. (2016). I Feel Less Confident So I Quit? Do True Changes in Teacher Self-Efficacy Predict Changes in Preservice Teachers' Intention to Quit Their Teaching Degree? *Teaching and Teacher Education*, vol. 55, p. 240-254.
- Ross, J., Bruce, C. (2007). Professional Development Effects on Teacher Efficacy: Results of Randomized Field Trial. *The Journal of Educational Research*, vol. 101, (1), p. 50-60.
- Tschannen-Moran, M., Woolfolk Hoy, A., Hoy, W. (1998). Teacher Efficacy: Its Meaning and Measure. *Review of Educational Research*. vol. 68, (2), p. 202-248.
- Chan, W., Lau, S., Nie, Y., Lim, S., Hogan, D. (2008). Organizational and Personal Predictors of Teacher Commitment: The Mediating Role of Teacher Efficacy and Identification With School. *American Educational Research Journal*. Vol. 45, (3), p. 597-630.

Appendix A

Daily Readings

Black, C. & Davis, L. (2015). Montessori All Day, All Year. *NAMTA Journal*, 40, 107-121.

Faber, A & Mazlish, E. (1987). How to Talk so Students Will Listen and Listen so Students Will Talk. *American Educator*. 37-42.

Girlando, S. (1999). The Role of the Assistant in a Montessori Classroom. In *Grace and Courtesy: A Human Responsibility*. AMI/USA Conference. (pp. 107-111). Rochester, NY.

Joosten, A.M. (1997). On Discipline.

Joosten, A.M. (1956). Errors and Their Correction. *Around the Child*, 1.

Montessori, M. (1946). Education for Independence. In A. Haines (Ed.) *The 1946 London Lectures*. (pp. 129-135). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (1946). Social Development and Adaptation. In A. Haines (Ed.) *The 1946 London Lectures*. (pp. 80-86). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (1946). The New Teacher. In A. Haines (Ed.) *The 1946 London Lectures*. (pp. 225-231). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (1946). The Most Important Age. In A. Haines (Ed.) *The 1946 London Lectures*. (pp. 136-143). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (1946). Unlocking the Intelligence. In A. Haines (Ed.) *The 1946 London Lectures*. (pp. 69-79). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

## Improving Teacher Efficacy

Montessori, M. (2006). Observations of Prejudices. *The Discovery of the Child*. (pp. 195-205).  
Thiruvanimiyur, India: Kalakshetra Press.

Montessori, M. (2006). Teaching Methods Used in the Children's House. *The Discovery of the Child*. (pp. 62-88). Thiruvanimiyur, India: Kalakshetra Press.

Montessori, M. (2006) The Material for Development. *The Discovery of the Child*. (pp. 132-138). Thiruvanimiyur, India: Kalakshetra Press.

Montessori, M. (2009). Children, Teachers and Society. In C. Juler & H. Yesson (Ed.) *The Child, Society and the World: Unpublished Speeches and Writings*. (pp. 72-75). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (2009). On Recurring Themes: On Social Education. In C. Juler & H. Yesson (Ed.) *The Child, Society and the World: Unpublished Speeches and Writings*. (pp. 20-28). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (2009). Methods Evolved by Observation. *Education For a New World*. (pp. 75-83). Thiruvanimiyur, Madras-41, India: Kalakshetra Press.

Montessori, M. (2009). The Bugbear of Discipline. *Education For a New World*. (pp. 84-92). Thiruvanimiyur, India: Kalakshetra Press.

Montessori, M. (2009). What a Montessori Teacher Needs to Be. *Education For a New World*. (pp. 93-97). Thiruvanimiyur, Madras-41, India: Kalakshetra Press.

Montessori, M. (2010). Environment. *The Advanced Montessori Method-I*. (pp. 111-117). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

Montessori, M. (2010). The Preparation of the Teacher. *The Advanced Montessori Method-I*. (pp. 98-110). Amsterdam, The Netherlands: Montessori-Pierson Publishing Company.

## Improving Teacher Efficacy

Montessori, M. (2014). Further Developments. In B. Carter (Ed.) *The Secret of Childhood*. (pp. 118-129). Hyderabad, India: Orient Blackswan Private Limited.

O'Shaughnessy, M. (2000). Free Fall and Surrender. NAMTA Bulletin.

Appendix B

Schedule of Readings

Date	Title	Author
1/16	The Role of the Assistant in a Montessori Classroom	Sandra Giralto
1/17	The New Teacher	Maria Montessori
1/18	On Discipline	A.M Joosten
1/19	How to Talk so Students Will Listen and Listen so Students Will Talk	Adele Faber and Elaine Mazlish
1/22	Errors and Their Correction	A.M Joosten
1/24	Free Fall and Surrender	Molly O'Shaughnessy
1/25	What a Montessori Teacher Needs to Be	Maria Montessori
1/29	The Bugbear of Discipline	Maria Montessori
1/30	On Recurring Themes	Maria Montessori
1/31	Social Development and Adaptation	Maria Montessori
2/1	Children, Teachers and Society	Maria Montessori
2/2	Methods Evolved by Observation	Maria Montessori
2/5	Further Developments	Maria Montessori

## Improving Teacher Efficacy

2/6	The Preparation of the Teacher	Maria Montessori
2/7	Teaching Methods used in Children's House	Maria Montessori
2/8	The Material for Development	Maria Montessori
2/9	Observations on Prejudices	Maria Montessori
2/12	Environment	Maria Montessori
2/13	All Day Montessori	Connie Black and Liza Davis
2/14	Education for Independence	Maria Montessori
2/15	Unlocking the Intelligence	Maria Montessori
2/16	The Most Important Age	Maria Montessori



Appendix C

Pre/Post Survey A

Adapted from work done by Albert Bandura

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0      10      20      30      40      50      60      70      80      90      100  
 Cannot do at all                                  Moderately can do                                  Highly certain can do

Category	Confidence 0-100
<b>Efficacy to Influence Decision Making</b>	
Influence the decisions that are made in the school	
Express my views freely on important school matters	
<b>Instructional Self-Efficacy</b>	
Keep students on task on difficult assignments	
Increase students' memory of what they have been taught in previous lessons	
Support students in his/her development	
Motivate students who show low interest in schoolwork	
Support students to work well together	
<b>Disciplinary Self-Efficacy</b>	
Support children in following classroom rules	

## Improving Teacher Efficacy

Control disruptive behavior in the classroom	
Engage students in mindful interactions with each other	
Prevent problem behavior during outdoor activities	
Influence students to be more peaceful	
<b>Efficacy to Create a Positive School Climate</b>	
Make the school a safe place	
Make students enjoy coming to school	
Support students in trusting adults in the environment	
Help other teachers with their Montessori teaching skills	
Increase collaboration between teachers and the administration to make the school run effectively	
<b>Efficacy to Enlist Parental Involvement</b>	
Make parents feel comfortable coming to school	
Support parents in their involvement with the school	

Bandura, Albert. (2006). Self-efficacy beliefs in adolescents.

Appendix D

Pre/Post Survey B

Adapted from work done by Albert Bandura

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0      10      20      30      40      50      60      70      80      90      100  
 Cannot do at all    Moderately can do    Highly certain can do

Category	Confidence 0-100
<b>Efficacy to Influence Decision Making</b>	
Influence the decisions that are made in the school	
Express my views freely on important school matters	
<b>Efficacy to Create a Positive School Climate</b>	
Make the school a safe place	
Help other teachers with their Montessori teaching skills	
Increase collaboration between teachers and the administration to make the school run effectively	
Find solutions to solve problems with other adults	
<b>Efficacy to Contribute to the Montessori Environment</b>	
Express ideas to other teachers about the environment set-up	
Contribute to the success of material making	

## Improving Teacher Efficacy

Make informed decisions about placement of materials	
--	--

Bandura, Albert. (2006). Self-efficacy beliefs in adolescents.

Improving Teacher Efficacy

Appendix E

Scale of Accomplishment

Scale of Accomplishment

0 feeling very unaccomplished      1      3 had moments of accomplishment      4      5 feeling

Dates:

1/15 No School	1/16	1/17	1/18	1/19
1/22	1/23 Snow Day	1/24	1/25	1/26 No School
1/29	1/30	1/31	2/1	2/2
2/5	2/6	2/7	2/8	2/9
2/12	2/13	2/14	2/15	2/16