

DISSERTATION

MOTIVES AND SUCCESS FACTORS IN CO-TEACHING RELATIONSHIPS: A
QUALITATIVE CASE STUDY

Submitted by

Samuel "Kelley" Hammel

School of Education

In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Fall 2021

Doctoral Committee:

Advisor: Ann Sebald

Ernie Chavez
Tom Chermack
Carole Makela

Copyright by Samuel “Kelley” Hammel 2021

All Rights Reserved

ABSTRACT

MOTIVES AND SUCCESS FACTORS IN CO-TEACHING RELATIONSHIPS: A QUALITATIVE CASE STUDY

The purposes of this research were to understand what factors contributed to the success of highly rated co-teaching experiences and understanding to what extent those success factors are related to measured human motive constructs within the context of the acquired needs theory of motivation. The purpose included understanding the motives and success factors within the context of the global Covid-19 pandemic. To achieve these overall objectives, the following research questions guided this study:

1. What do the Teacher Candidate (TC) and Mentor Teacher (MT) believe are the top five reasons why this specific co-teaching experience was successful (Success Factors)?
2. Are there any common Success Factors among the MT/TC teams studied?
3. Are any of the Success Factors related to the three motivation constructs being studied, being the affiliation motive, achievement motive, and power motive of the TC or MT?
4. What do the TC and MT believe about how their own measured motives contributed to the success of the co-teaching experience?
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

Four co-teaching teams from four different northern Colorado elementary schools were

selected for a total of seven individuals (four teacher candidates and three mentor teachers). All seven participants were interviewed after completing thematic apperception tests measuring the relative strength of the achievement, affiliation, and power motives of each individual.

Themes emerging from the data included: (1) the importance of relationship and communication in co-teaching teams, (2) the importance of *resourceful power* in co-teaching teams, and (3) the importance of co-teaching during the pandemic or other emergencies.

Recommendations for teacher educators and school administrators are provided based on each of these emergent themes. Given the findings, this study recommends further investigation of complementary motive patterns of successful co-teaching teams and the presence or absence of resourceful power within successful co-teaching teams.

ACKNOWLEDGEMENTS

I would like to express a heartfelt thank you to all those supporting me in this process of achieving my doctoral degree. A very special thank you first to my amazing wife Angie for your faithful love and support over the last 38 years. What a blessing you are. Thank you to my daughter Megan and her husband Kevin, my daughter Rachael and her husband Matt, my son Caleb and his wife Monica, and my son Nathan. Your encouragement and our relationship are precious to me. You have enriched my life greatly. Thank you to our two young granddaughters Lyla and Fiadh for bringing so much joy, goodness, and light into our world. Cousin Johnny, you have encouraged me more than you will ever know. Thank you for being like a brother to me. And thank you to my parents and grandparents who provided a foundation and envisioned this degree decades ago. To all my incredible friends in Ohio, Colorado, and Hawaii, thank you for the years of friendship and support.

I would like to express my deep gratitude for Dr. Ann Sebald, my advisor and committee chair. It has been a pleasure working with you and learning from you. Thank you for the guidance and for keeping me encouraged. Thank you Dr. Ernie Chavez, Dr. Tom Chermack, and Dr. Carole Makela, my committee members, for the advice and guidance through this process.

Finally, I would like to take a moment to thank all the great researchers, writers, and academics of the past, on whose shoulders we all stand, who have given so much of themselves to illuminate and inspire. I look forward to continuing to learn from you.

TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENTS	iv
CHAPTER 1: INTRODUCTION	1
Statement of Problem	1
Purpose	5
Research Questions	6
Significance of the Study	7
Theoretical Perspectives.....	8
Definition of Terms	10
Dissertation Overview.....	15
CHAPTER 2: REVIEW OF LITERATURE.....	18
Theories of Human Motivation and the Acquired Needs Theory	18
Maslow’s Hierarchy of Needs	20
Alderfer’s ERG Theory: Existence Needs, Relatedness Needs, and Growth Needs	24
Herzberg’s Two Factor Theory Also Known as Motivation-Hygiene Theory	26
Skinner's Reinforcement Theory	30
Vroom's Expectancy Theory	31
Adams' Equity Theory.....	34
Locke's Goal Setting Theory	37
McClelland’s Acquired Needs Theory.....	39
Achievement, Affiliation, and Power	40
The Leadership Motive Pattern	43
The Leadership Motive Pattern and Gender.....	43
Motivating Achievement and Organizational Climate	46
Achievement Arousal and Power Arousal.....	50
The Impact of Leadership Styles on Climate and Motivation.....	53
Acquired Needs Theory Conclusion.....	56
Co-teaching and the Global Pandemic	56

CHAPTER 3: METHODOLOGY	60
Philosophical Foundation.....	61
Research Design.....	64
Type of Case Study.....	64
Analysis	65
Data Collection Methodology	66
Thematic Apperception Test	67
Interviews	69
Participants.....	71
Research Site	72
Research Steps.....	74
Trustworthiness	74
Researcher Positionality	76
Delimitations and Limitations.....	78
Summary	80
CHAPTER 4: RESEARCH FINDINGS.....	81
Background	82
Team 1 Findings.....	84
Thematic Apperception Test	84
Interviews	87
Success Enablers and Inhibitors	87
Achievement, Affiliation and Power	88
Pandemic Impact	90
Team 2 Findings.....	91
Thematic Apperception Test	91
Interviews	94
Success Enablers and Inhibitors	94
Achievement, Affiliation, and Power	95
Pandemic Impact	95
Team 3 Findings.....	96
Thematic Apperception Test	96

Interviews	99
Success Enablers and Inhibitors	100
Achievement, Affiliation, and Power	100
Pandemic Impact	101
TC4 Findings	102
Thematic Apperception Test	102
Interview	104
Success Enablers and Inhibitors	104
Achievement, Affiliation, and Power	105
Pandemic	107
Collective Interviews	107
Success Enablers and Inhibitors	107
Achievement, Affiliation, and Power	108
Pandemic Impact	110
Summary	110
CHAPTER 5: DISCUSSION, RECOMMENDATIONS, AND CONCLUSION	114
Discussion	114
Theme 1: Importance of Relationship and Communication in Co-teaching Teams	116
Recommendations for Teacher Educators	119
Recommendations for School Administrators	119
Theme 2: Importance of Resourceful Power in Co-teaching Teams	121
Recommendations for Teacher Educators	124
Recommendations for School Administrators	124
Theme 3: Importance of Co-teaching during the Pandemic or Other Emergencies	125
Recommendations for Teacher Educators and School Administrators	127
Limitations of this Research	127
Recommendations for Future Research	130
Conclusion	132
REFERENCES	134
APPENDIX A: INTERVIEW GUIDE	147
Interview Questions	149

APPENDIX B: SUMMARY OF TEAM 1 INTERVIEW RESPONSES	152
APPENDIX C: SUMMARY OF TEAM 2 INTERVIEW RESPONSES	161
APPENDIX D: SUMMARY OF TEAM 3 INTERVIEW RESPONSES	169
APPENDIX E: SUMMARY OF TC4 INTERVIEW RESPONSES	182
APPENDIX F: IRB APPROVAL DOCUMENT	188
APPENDIX G: MENTOR TEACHER RECRUITMENT LETTER	190
APPENDIX H: TEACHER CANDIDATE RECRUITMENT LETTER.....	191
APPENDIX I: MENTOR TEACHER CONSENT FORM	192
APPENDIX J: TEACHER CANDIDATE CONSENT FORM	194

CHAPTER 1: INTRODUCTION

Often, businesses and institutions design and execute processes or implement policies without ever expending the resources necessary to make a useful post-mortem inquiry into what factors contributed to their success or brought about their demise (Reader, 2006). Some of these processes and policies understandably may not be deemed important enough to warrant investment by decision makers and administrators in favor of other more important priorities. However, there are implications to any organization's ability to successfully learn and continuously improve when decision makers and administrators, anxious to move on to the next thing, neglect or actively choose to not invest time and money into robust after-the-fact inquiry on mission critical human systems, policies, procedures, and processes. As the world becomes more economically competitive and institutions face human resource attrition based on better economic options elsewhere, organizations must continuously strive to maintain their advantage (Reader, 2006). The research in this study makes qualitative inquiry into one such important process in the preparation of educators at Colorado State University (CSU), namely the co-teaching experience, which student teachers may voluntarily select during their final semester. In this optional co-teaching experience, a student teacher, known as the teacher candidate (TC), is paired in the classroom with an experienced licensed teacher/mentor, known as the mentor teacher (MT). This study examines the motives of both the MT and TC as well as the success factors of their co-teaching experience to learn more about and continuously improve the educator preparation process.

Statement of Problem

Research studying both non-profit and for-profit organizations reveals excessive employee turnover measurably decreases operational efficiency and increases human resource

costs. Boushey and Glynn (2012) examined 30 case studies taken from 11 research papers and found employers spend at least one-fifth of staff members annual salary to replace them. Their analysis reveals the cost to replace professional positions is even higher than one-fifth of the annual salary of employees. Teachers are no exception. The situation with teachers is worse because unlike most professions where an ample supply of replacement people is generally available, teachers are in short supply nearly everywhere for a variety of reasons (Sutcher et al., 2016). The current teacher attrition and replacement crisis is exacerbated by the reality of the growing populations, thus the growing need for teachers in every region (urban, suburban, and rural) and every state, county, city, town and village. Unlike other businesses which can conveniently locate themselves where talent pools flourish and qualified people are plentiful in supply, school districts cannot. Each year many K-12 students enter one of more than 100,000 classrooms across the United States, which are staffed by personnel unqualified to teach (Carver-Thomas & Darling-Hammond, 2017). The evidence shows the current shortage of teachers is driven by four primary factors (Sutcher et al., 2016):

- high teacher attrition
- a decline in enrollment in teacher preparation programs
- district efforts to return to lower pupil-teacher ratios
- increasing K-12 student enrollment

Now, teacher shortages and teacher turnover are among the most critical issues in education across the United States (McKenna, 2018). The research in this study was done in response to the determination that the key underlying reasons for increased teacher attrition and declining teacher enrollments are: (a) lack of preparation of teachers before they enter the

workforce, and (b) motivation they experience as other more lucrative and/or fulfilling opportunities present themselves throughout their tenure as teachers (Ingersoll et al., 2014).

The primary purpose of the elective co-teaching experience during the final semester is to better prepare teachers for the classroom including preparing them for its potential perils and pitfalls, as well as its highly motivating blessings and benefits. Teachers entering the workforce with little or no preparation are two and one half times more likely to leave the teaching profession after one year compared to their well-prepared peers (Sutcher et al., 2016). Because lack of preparation has been identified as one of the primary factors in teacher attrition, it is appropriate and necessary to study the co-teaching experience as a means to improve teacher preparedness with the same after-the-fact rigor all too often ignored in important business and academic processes as previously mentioned. This research examined the success factors of the co-teaching experience and looked for common and complementary motives of the MTs and the TCs. For the purposes of this research, McClelland's (1965c) acquired needs theory of human motivation served as the foundational theoretical basis including McClelland's definition of motive or motivation being a recurrent concern toward a goal state or condition, measured in fantasy, which drives, directs, or selects the behavior of the individual (McClelland, 1985, 2013).

A more detailed discussion of the underlying building blocks of motivation within the theoretical framework of the acquired needs theory is provided in the literature review. However, it is useful to briefly breakdown McClelland's operational definition of "motive" here. Even listing its constituent parts serves to help state the problem:

- a recurrent concern
- toward a goal state or condition
- measured in fantasy,

- which drives, directs, or selects the behavior of the individual

In a free society, teacher attrition is fundamentally driven by the *behavior of the individual* whether it be the *behavior* of the teacher whose *recurrent concerns* and *goal states* lead them to choose another career or the *behavior* of administrative staff including the principal who, often unknowingly motivates the teachers to choose other professions (Hughes et al., 2015). It is not always poor leadership of principals which can motivate teachers to leave. High rates of teacher turnover can be the result of high principal turnover (Heck & Hallinger, 2009). Not surprisingly this phenomenon of the relationship between teacher turnover and principal turnover is consistent with observations in the business world where management turnover is correlated to low employee satisfaction and job avoidance by employees (Hom & Kinicki, 2001). Successful management of change depends to a large degree on the consistency and quality of leadership during change (Albion & Gagliardi, 2007). Schools are organizations like any other, and force fitting archaic, obsolete paradigms and processes into the modern classroom when better, more efficient models are available seems foolish. Businesses, which have the luxury to freely employ the full spectrum of best practices, enjoy far more success in attaining their goals than public education does when public education excludes the notion that all options are on the table. Successful businesses never take options off the table.

Additionally, teacher preparedness or lack thereof is very much driven by the *behavior of the individual* TCs in their programs. In the case when the co-teaching experience is selected, teacher preparedness or lack thereof is driven by the *behavior of two individuals*, the TC and the MT. Organizations—with all their technology, processes, complexity, and massive accomplishments—are at their core, comprised of people. A team of two is an organization. Arguably, two person teams have historically been among the most consequential organizations

in all of human history. In the case of co-teaching, the TC and the MT are also a consequential organization of two with far-reaching consequences impacting many children and adolescents for long periods of time. Learning about the respective and collective *recurrent concerns* of this two-person organization during the co-teaching experience and their respective and collective *goal states* during the co-teaching experience will help illuminate the path and guide the steps of people responsible for teacher preparation in universities and other institutions.

Where do these *recurrent concerns toward a goal state* reside? Where can they be observed in daily operation, and where must one go to measure them? They are born, live, procreate, and die in the world of *fantasy*—within the mind of the individual—most of the time unobservable to the naked eye (Atkinson, 1958). There are few behaviors without precedent thoughts—particularly for behaviors, which are driven, directed, and selected by recurrent concerns toward a goal state, and these recurrent thoughts and concerns must be measured in fantasy to be effectively observed (Spencer, 2017). There are few better ways to learn about a person’s motivation than to have insights into what they think about in idle times—what preoccupies their mind—what keeps them up at night or what they day dream about.

Purpose

Teacher preparedness is foundational and has been identified to be one of the primary factors in teacher attrition and shortages across the United States (Ingersoll et al., 2014). It is important to better understand the factors which make the co-teaching experience successful during the final phase of teacher preparedness. In addition, improving the understanding of the underlying motives of the parties involved in successful co-teaching experiences is important. This research used a qualitative exploratory case study to answer the research questions which provided the framework of the study. The purpose of this qualitative case study was to

understand what factors contributed to the success of highly rated co-teaching experiences for MTs and TCs and to what extent those success factors are related to the measured underlying human motives of the MTs and the TCs. These motives were defined by and measured within the context of the acquired needs theory of motivation. The purpose included understanding these success factors within the context of the global Covid-19 pandemic in 2021.

Research Questions

The following research questions served as the basis for this qualitative case study of elementary school MTs and their Colorado State University (CSU) TCs. For the purposes of this research, a “successful” co-teaching experience was defined as one which persisted for at least 75% of the semester and was rated as “good” or better by both the TC and the MT. To qualify for this study, participants had to persist in the co-teaching experience during the spring, 2021 semester. The research questions included:

1. What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (“Success Factors”)?
2. Are there any common Success Factors between the MT/TC teams studied?
3. Are any of the Success Factors related to the three motivation constructs being studied, the affiliation motive, achievement motive, and power motive of the TC or MT?
4. What do the TC and MT believe about how their measured motives contributed to the success of the co-teaching experience?
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

Significance of the Study

The intent of this study was to contribute to the overall knowledge base regarding CSU's co-teaching program and teacher preparedness in general particularly during a global pandemic. Additionally, the study was to contribute to the knowledge base regarding motives and acquired needs within two-person co-teaching teams and two person organizations in general. Improved understanding of successful co-teaching experiences and what made them successful may guide and benefit people implementing co-teaching programs at CSU and potentially within other universities as well.

The *acquired needs theory* posits that beyond basic survival and sexual needs lie three fundamental needs which *drive, direct, and select* much of the workplace and academic human behavior in our modern world. These three dominant needs are *achievement* (represented in the literature as nAch or nAchievement), *affiliation* (represented in the literature as nAff or nAffiliation), and *power* (represented in the literature as nPow or nPower (McClelland et al., 1989). The lowercase *n* in the nomenclature represents “need” as in *need for achievement, need for affiliation, or need for power*. These three fundamental needs posited by the acquired needs theory support the definition of motive, especially as it relates to organizations including small teams and two person teams once basic physical, safety, and sexual needs are essentially satisfied. These three needs are *recurrent concerns toward a goal state*. Physical or sexual needs can often be measured by physiological responses or measured chemically rather than being *measured in fantasy*. The needs for achievement, affiliation, and power are *measured in fantasy*. The needs for achievement, affiliation, and power drive, direct, or select behavior of individuals and are foundational to McClelland's (1965a) definition of motive.

The recurrent concern or need to achieve can, under certain conditions, be intentionally enhanced or suppressed, and it is even observed to be transmitted from one team member to another (McClelland, 1965a). A robust qualitative inquiry into whether or not the achievement motive of the MT had influence on the TC in the co-teaching experience (or vice versa) may yield valuable insights on how to best select MTs and how to best match TCs with their volunteer mentors.

The same is true of how each party perceives the impact of their own motives on the success of co-teaching experiences. There may be great value in knowing more about the degree to which the TC and the MT believe their needs for achievement, affiliation, and power (nAch, nAff, and nPow) influenced or contributed to the success of the co-teaching experience.

Theoretical Perspectives

Interpretation of events and interpretation of the success or failure of human systems, policies, procedures, and processes should be the starting point for scholarly inquiry and the development of broader knowledge of the social world (Prasad, 2015). Prasad asserted that positivism is ill-equipped to answer many of the interesting questions in social science. The dream of understanding human behavior and the social world with the same precision and methods used in the natural sciences is impossible and pointless. The human capacity for interpretation alone—not to mention other human capacities such as imagination, delusion, and others—constantly thwart attempts to research and understand the social world as a mirror image to the natural world by using the same methods and systems for both (Flyvbjerg, 2001). Willis (2007) considered the interpretive tradition to be a solid response to the excesses of “scientific” social science and a response to objectivism. We each come to situations biased with prior understanding based on our experiences and interpretations, and we come preprogrammed to some

degree with genetic coding, which with each passing year we are discovering has more and more influence over us. As a result, sterile objectivism imported from the natural sciences is often fruitless in social science research (Willis, 2007).

Modern physics has determined that even the natural sciences are not truly as objective as once thought. As we gain deeper understanding of the quantum world upon which physical reality is built, we face the lack of certainty of when and where reality exists. This combined with the realization that we—by simply measuring or observing reality—collapse any number of 17 different quantum wave functions, which forever alter what is “observed” by the very nature of observing it (Bassi et al., 2013). Quantum field theory and the standard model of particle physics leading us to this subjective nature of reality are among the most accurate and predictive scientific theories ever discovered; all experiments ever performed agree with them (Fitzpatrick, 2015). Discovery of very weird behavior of matter such as quantum superposition, tunneling, and entanglement are clear manifestations of the subjective nature of physical reality due to the quantum fields, wave functions, and uncertainty governing reality. These quantum fields are ubiquitous and are spread out like a fabric throughout the entire universe; it is the way the reality is constructed (Georgi, 1995). Objectivity appears to be a dream in the social world and in the natural world built upon quantum fields. Physical particles and the forces between them do not really exist. Instead, wave-like fluctuations within the 17 quantum fields appear to us as particles and forces upon which the entire natural world is built and none of which is completely *knowable* as a positivist or post-positivist would interpret *knowing*. Objectivity is an illusion.

The qualitative case study research for this dissertation is rooted in the interpretive theoretical perspective, which served as both rudder and anchor for the study and analysis. Interpretivism embraces subjectivity and seeks to better understand the case being studied in

which the researcher is an active participant. This is a different paradigm from positivism which seeks to objectively explain the actions observed (Schwandt, 2000). Purposeful selection of the theoretical perspective for the inquiry and being clear about it was important because it provided direction for the design and acted like a compass for both the researcher and the consumer (Jones et al., 2011). The research design process in qualitative research must begin with philosophical assumptions and embrace the fact that the researcher brings their own world views, paradigms, and beliefs to the project, and these inform the conduct and writing (Creswell & Creswell, 2018). This qualitative case study research recognized the theoretical perspective deepens and enriches the research when the methodology and other components actually integrate with the philosophical and theoretical perspectives rather than just mentioning them as discrete but otherwise unrelated sections of the writing (Crotty, 1998).

Definition of Terms

The following terms were operationally defined for the purpose of this study.

1. *Co-teaching*: The general definition of co-teaching is two or more professionals working together in a single classroom to deliver substantive instruction to diverse or blended group of students (Cook & Friend, 1995). There are four boundary conditions in defining co-teaching:
 - a. For the purposes of definition, parent volunteers, older student volunteers and paraprofessionals are not considered professional teachers and do not meet the criteria of co-teachers. However, TCs in their final semester having completed all or most of the licensure requirements, except for the final student teaching experience in the classroom, are considered *professionals* as it pertains to co-teaching. The second educator must be a professional educator.

- b. The co-teacher must deliver substantive instruction. Monitoring students, guest speaking, study support, or other marginal or ancillary roles do not meet the boundary condition criteria of a co-teacher.
- c. To be considered co-teaching, collaborative planning must occur between the teachers. Co-planning between the two teachers constitutes co-teaching with various strategies such as separating the students or co-teaching in separate physical spaces, or other strategies as the curriculum or specific learning needs may require.
- d. Lastly, co-teaching typically involves delivering instruction to a diverse or blended group of students. The U.S. Department of Education defined diversity based on the following seven categories: gender, social economic status, English learners, minority students, ethnicity, special needs, and gifted status. It is important to note that the intent of co-teaching is to exploit the diverse strengths of two or more educators to more effectively teach a more blended or diverse set of students.

For the purposes of this study, the co-teaching experience being studied adheres to the definition found in the literature. In this study, the co-teaching experience specifically refers to the program within the School of Education at Colorado State University, which seeks to improve teacher preparedness by giving students the option (not the requirement) to work with a seasoned teacher in the classroom during their student teaching semester (typically their final semester at CSU).

The alternative to co-teaching is the traditional model where CSU TCs gradually take over classrooms and teaching responsibilities while being supervised by a licensed

teacher. However, the TC does so without the mentorship and benefit of working with a seasoned professional within the four pillars of the co-teaching preparedness program: co-planning, co-instruction, co-assessment, and co-reflection (Murawski, 2003).

2. *Mentor teacher (MT)*: The licensed teacher with at least three years of experience who participates as mentor in the co-teaching arrangement. MT and cooperating teacher are used synonymously in the literature. Mentor teacher, MT, cooperating teacher, and CT may be used interchangeably throughout this dissertation.
3. *Teacher candidate (TC)*: The CSU TC in the co-teaching experience. (Note: Teacher candidate and TC may be used interchangeably throughout this dissertation.)
4. *Traditional student teaching or traditional model*: Student teaching is a requirement for licensure. *Traditional student teaching or traditional model* refers to the required student teaching for licensure with the absence of co-teaching as defined above during the CSU student teacher's final semester. This typically involves being in the classroom alone, teaching solo. Typically, a licensed teacher is available for oversight and questions as needed but does not engage in the teaching alongside the TC.
5. *Motive*: The recurrent concern toward a goal state or condition, measured in fantasy, which drives, directs, or selects the behavior of an individual.
6. *nAch or nAchievement*: The achievement motive or need (n) for Achievement is defined as a recurrent concern toward the goal state of accomplishing meaningful or important things in one's life or with one's time. Note that need or recurrent concern toward the recognition of these accomplishments does not fall within the achievement motive (McClelland, 1961). Instead, the need for recognition of accomplishment typically falls within the realm of the Power Motive (nPow). The determination of what is "meaningful"

or “important” lies solely within the mind of the individual. The need or recurrent concern to accomplish things, which are meaningful or important to others when they are actually not meaningful or important to the individual sometimes falls within the realm of the affiliation motive (nAff). More often it falls within the realm of the power motive (nPow) when the recurrent concern involves establishing or maintaining the individual’s reputation for having good relationships or personal recognition for the same.

7. *nAff or nAffiliation*: The affiliation motive or need (n) for affiliation is defined as a recurrent concern toward the goal state of having and maintaining meaningful or fulfilling relationships with others. The need for recognition of those relationships may fall within the affiliation motive provided the recurrent concern for recognition involves deepening relationships in questions (McClelland & Burnham, 2017). However, the need for recognition of the relationship by other parties outside of the relationships in question indicates the need actually falls within the power motive (nPow). Once again, the determination of what is “meaningful” or “fulfilling” lies solely within the mind of the individual. The need or recurrent concern to have relationships, which others believe are meaningful when they are not meaningful to the individual falls within the realm of the Power motive (nPow), particularly if the recurrent concern in question involves influence or self-aggrandizement.
8. *nPow or nPower*: The power motive or need (n) for power is defined as a recurrent concern toward the goal state of influencing others. nPow includes recurrent concerns for one’s own reputation, image, or position. This often includes the need for recognition from others including status symbols.

9. *Personalized power or nPowP*: The personalized power motive or need (n) for personalized power is defined as a recurrent concern toward the goal state of influencing or controlling others for personal gain or self-aggrandizement.
10. *Socialized Power or nPowS*: The socialized power motive or need (n) for Socialized Power is defined as a recurrent concern toward the goal state of influencing or controlling others for the greater good or the general welfare.
11. *Power Arousal*: The state or condition in which two or more individuals (or teams) diminish their capacity to cope with one another or to perform as an organization (including an organization of two) due to behavior which is driven, directed, or selected by one individual's need for power, which then causes or tempts one or more of the others to respond in kind with their own nPow behavior. Typical manifestations of power arousal include situations where each individual (or team) attempts to “amp up” or “one-up” the other(s) in a cascading fashion. Power arousal can and often does occur in all relationships and organizations of all sizes including two-person organizations such as small partnerships and teams.
12. *Thematic apperception test (TAT)*: A projective test originally developed by Morgan and Murray (1935), which involves showing respondents a series of ambiguous pictures from which the respondent writes a creative story about what is happening in the scene before them and in the lives of the individuals in the scene. The purpose of the test is to learn more about the recurrent concerns of the respondents—specifically recurrent concerns and recurrent thoughts toward achievement, affiliation, and power (both personalized power and socialized power). Respondents are asked to tell a story explaining what is happening in the picture including the events that led up to the scene. They write about

what is happening in the scene, what each of the characters is thinking or feeling, and what happens next. This occurs for each picture and is intended to reveal deeper subconscious recurrent themes of concern. Typically the test is scored numerically by counting the relative number of clear achievement-oriented, affiliation-oriented and power-oriented concerns or goals the writer brings to life on paper from fantasy/creative writing. In the complete test as originally developed by Morgan and Murray, 31 pictures are used resulting in 31 stories. More recent use of the TAT by practitioners typically involve between five and 12 pictures depicting a variety of neutral yet provocative social scenes, which may include men, women, and/or children. Scoring the TAT results in numbers reflecting the relative strength of the respondent's nAch, nAff, nPow, nPowP, and nPowS. Respondents and their team member(s) tend to find the TAT very revealing as to the underlying motives or needs of each individual in the team or organization—even an organization of two. Qualitative in nature, the TAT is primarily intended to learn more about the recurring thoughts of the respondent and less concerned with an absolute scientific perfection based on a post-positivist worldview.

Dissertation Overview

This chapter discussed the problem statement beginning with the costs and implications of workforce turnover in general and teacher attrition specifically. Present teacher shortages including the underlying causes and additional implications of unprepared teachers in the workforce were discussed in the problem statement, as well as co-teaching as a means of effectively addressing teacher preparedness. Additionally, the *acquired needs theory* of motivation was introduced as the foundational theoretical framework for this dissertation along

with discussing the benefits of learning more about co-teaching success factors and motivation signatures of co-teaching participants.

Chapter 1 framed the purpose of the study and the research questions resulting from lengthy consideration of the problem statement and discussed why a qualitative approach was selected to answer the research questions. It then addressed the significance of the study and how the benefits of the study will contribute to overall knowledge of what makes a successful co-teaching experience and how the affiliation, achievement, and power motives of the TC and MT may enhance or compromise successful co-teaching experiences. Next, theoretical perspectives were discussed including the paradigm behind the research and the selection of the interpretive approach to guide and anchor the qualitative research. Finally, operational definitions of key constructs, concepts, and tools were provided, which serve to provide better clarity and understanding.

Chapter 2 reviews the literature on human motivation theories and operational constructs including the thematic apperception test and its ability to measure the affiliation, achievement, and power motives as well as personalized power and socialized power motives. It begins with a literature review of the eight primary human motivation theories. The *acquired needs theory* is the last theory to be reviewed and is discussed in more detail than the others because it serves as the theoretical framework for this study. Chapter 2 concludes with a discussion of relevant literature on co-teaching and the impact of the global pandemic.

Chapter 3 defines the epistemological framework for this qualitative case study, as well as the philosophical foundations and research design. It discusses why the case study approach was chosen and why the semi-structured interview method within the case study was selected. Site and participant information are detailed including reasons for the purposeful selection

approach identified. Biases, data collection methods, data analysis, researcher positionality, limitations, and delimitations are included in Chapter 3.

Chapter 4 discusses the findings of this study in detail. Chapter 5 discusses the implications of the findings and recommends directions for future research.

CHAPTER 2: REVIEW OF LITERATURE

The purpose of this literature review is to provide the background for the study. This chapter begins with a review of the literature related to human motivation. Then eight primary theories of human motivation are reviewed. Literature involving the acquired needs theory of motivation is reviewed in more depth than the other seven because it provided the theoretical framework for the study. The chapter ends with a review of co-teaching during the global pandemic.

Theories of Human Motivation and the Acquired Needs Theory

Theories of human motivation abound. Eight theories of motivation dominate the literature, which can be split into two groups: content theories and process theories (Soós & Takács, 2013). The theories in the content group focus on *what* the sources of motivation are where theories in the process group focus on *how* human behavior is motivated. The content theories tend to be the earlier theories of motivation and have had the greatest impact on organizational management systems, best practices, and organizational policy. Process motivation theories focus on what kind of mechanisms and processes can influence human behavior. However, this does not mean that content theories of motivation cannot provide the theoretical framework and basis for effective, pragmatic leadership processes. To the contrary, as an example, the acquired needs theory (a content theory) successfully informs leadership processes and systems for motivating achievement in organizations of all sizes as described later in this chapter.

The main content motivation theories are Maslow's needs hierarchy, Alderfer's existence, relatedness, and growth (ERG) theory, Herzberg's two-factor theory, and McClelland's acquired needs theory (also known as the theory of needs). The main process

motivation theories are Skinner's reinforcement theory, Vroom's expectancy theory, Adam's equity theory and Locke's goal setting theory. Figure 1 maps these primary motivation theories with McClelland's acquired needs theory highlighted because of its importance to this study.

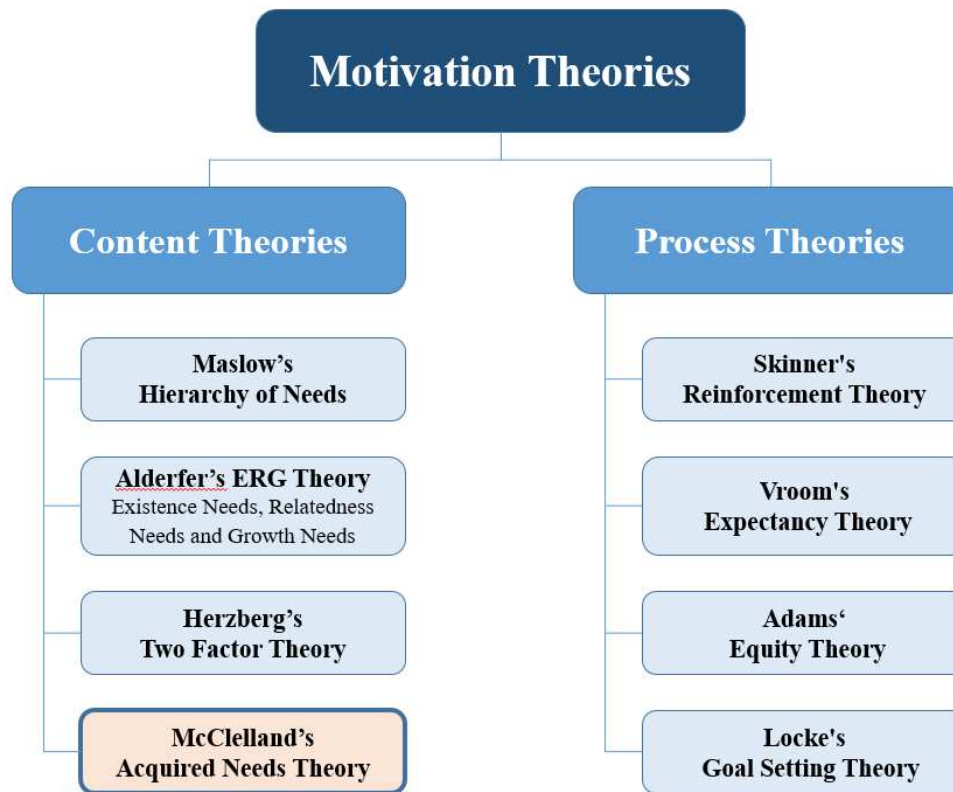


Figure 1

Mapping of the Dominant Theories of Human Motivation

McClelland's acquired needs theory was selected as the theoretical basis for this study, but it is useful to briefly review and discuss the other seven theories of motivation to provide some context and rationale as to why the acquired needs theory was selected for this research. Therefore, the other seven will be discussed first followed by a broader review and discussion of the literature involving the acquired needs theory and associated practical implementations.

Maslow's Hierarchy of Needs

Nearly everyone knows or at least has heard of Maslow's (1943) hierarchy of needs. Maslow developed this theory in the 1940s and 1950s making it one of the earliest theories of human motivation. Briefly, the theory posits there are five categories of basic needs Maslow sometimes labeled "goals", which are arranged internal to humans in a hierarchy of predominance (Maslow, 1943). When the most predominant need or goal is attained, people progress to the next level and the next higher or next dominant need establishes itself as the new primary goal or need. The five categories or levels are often represented by a five-level pyramid with the lowest, most basic physiological needs at the bottom and the highest self-actualization needs or goals at the top as shown in Figure 2.



Figure 2

Maslow's Hierarchy of Needs Represented as a Five Level Pyramid

Maslow (1943) suggested that denying or disrupting actual, perceived, or imminent needs in the hierarchy establishes a psychological threat, which can lead to psychopathy. The longer the needs are withheld or denied the stronger the motivation becomes and the stronger the desire to meet the need much like someone being denied food. Maslow believed people must satisfy lower-level basic needs before they are able to move forward and meet higher level growth needs. The theory suggests only after the underlying needs have been reasonably satisfied one may attain the highest level of self-actualization. Thus, even though every person is capable and may have the desire to move up the pyramid hierarchy toward self-actualization, life's setbacks and negative or self-limiting experiences (e.g., losses, job changes, divorce, death of loved ones, etc.) may result in individuals regressing or oscillating among levels of the hierarchy—sometimes indefinitely.

Satisfied needs do not motivate according to the theory (Maslow, 1954). At the foundation of the pyramid are the most basic *physiological* human needs of food, water, air, shelter, sleep, and some argue sex, which appear as the most absolute dominant needs. Maslow emphasized that when these needs remain unmet at basic levels all human capacities are put to the task of meeting the needs of each level and higher needs are subordinated and even forgotten.

Once level one physiological needs are met, level two *safety and security* needs emerge. Everything else, which is above level two appears much less important in comparison, and once again, all capacities are deployed to satisfy this level to a reasonable degree. Modern institutions and constructs such as insurance policies, savings accounts, retirement plans, social security, welfare, housing security, law enforcement, fire departments, first responders, hospitals, building codes, bankruptcy law, etc. serve as societal solutions to satisfying level two needs.

If both physical as well as safety and security needs are met, *love and belongingness* needs become most prominent. Note the similarity between this level three and McClelland's (1965a) nAff, the need for affiliation defined in Chapter 1. One of the shortcomings of Maslow's hierarchy of needs theory is its rigidity. Humans are complex, and they are different. Once beyond level two of the hierarchy, one size does not fit all. This is particularly true for this study involving co-teacher teams and is one of the reasons McClelland's theory was selected over Maslow's for the theoretical framework for this study. The hierarchy of needs theory does not seem to allow for variance and differences in the relative strength of the need for affiliation, achievement, and power observed in modern organizations—even organizations of two. As we shall soon see as we approach the top of the pyramid, the theory seems to ignore the need for achievement or awkwardly embed elements of achievement scattered across the top three levels. In addition, the theory does not appear to allow for simultaneous needs where a particular individual may have needs from multiple levels three, four, and five, which appear simultaneously without a "hierarchy" or ranking.

After love and belongingness needs are reasonably satisfied, the theory suggests *esteem* takes first chair in terms of importance and prominence. Being valued, respected, and appreciated by others is a basic human need according to Maslow who set forth two levels of esteem ("lower" and "higher"). According to Maslow, the "lower" level of esteem involves a strong need for respect from others. Examples include status symbols, prestige, self-importance, being listened to, etc. Note the similarity between this "lower" esteem and McClelland's aforementioned nPow-P (need for personalized power). Maslow's "higher" level of esteem involves a strong need for self-respect. Examples include the need for independence, self-confidence, and self-reliance.

Finally, after all other lower-level needs are met, the theory posits that *self-actualization* needs take preeminence and can finally be met. This highest level according to Maslow reflects a person's need or desire or goal to grow and develop into their fullest potential—to be the most that they can be. Maslow believed that people must not just achieve the lower-level needs first but must overcome them to realize self-actualization and pursue their full potential. Maslow believed it is only at this highest level (five) that the largest differences in people emerge.

Sadly, history affirms that manipulation and unhealthy control by denying or thwarting level one and two needs and higher level three and level four needs is all too common in war time and in abusive or unhealthy interpersonal relationships (Rubenstein, 2001). It is important to note that one behavior may serve to satisfy multiple levels. For example, going to a well-loved bar may satisfy needs at all levels particularly when competition or performance is involved such as playing pool, darts, karaoke, etc. Finally, noticeably absent from Maslow's hierarchy is McClelland's nAch, the need for achievement. Self-actualization perhaps comes closest, but there is a fundamental difference between Maslow's need to fulfill one's fullest potential and the need to achieve accomplishments important to the individual, however small those accomplishments may be. We find that even though Maslow's theory was a break through and foundational for its time, McClelland's acquired needs theory has more relevance and practical usefulness for this study where, like most businesses and learning organizations, the basic needs of levels one and two are being provided outside the organization or indirectly by monetary compensation from the work being performed outside the dynamics of the specific organization or two-person team in this case.

Alderfer's ERG Theory: Existence Needs, Relatedness Needs, and Growth Needs

Alderfer believed in an internal structure of needs or classes of needs but reduced the steps to three categories of needs and asserted because a lower-level need has been satisfied does not mean it does not continue to motivate individuals or remain a constant need or ongoing recurrent concern requiring continuous fulfillment for a sense of satisfaction (Furnham, 2012).

The three ERG classes of needs can be viewed as splitting and recombining Maslow's hierarchy:

1. Existence needs: Existence needs include all the basic necessities of life and health.
On Maslow's hierarchy, existence needs can be viewed as the combination of the first two levels of physiological needs as well as safety and security needs.
2. Relatedness needs: Alderfer believed people need relationships they view as important or significant in their lives and that individuals strive toward an additional relatedness need of recognition or public fame. Alderfer's relatedness needs can be viewed as a combination of Maslow's love and belongingness level of the hierarchy combined with the external or Maslow's "lower" esteem needs, which include prestige, honor, and recognition.
3. Growth needs: The need for improvement, advancement, self-development, and personal growth combine to form the final level or class of Alderfer's ERG needs theory. Growth needs can be seen as Maslow's intrinsic or internal esteem needs combined with level five self-actualization needs.

Alderfer's ERG Theory of Motivation differs from Maslow's theory in three important ways (Guterman & Alderfer, 1974):

1. Lower-level needs do not necessarily have to be satisfied for motivation involving higher-level needs to be effective. This difference has profound effects on the

implementation of ERG theory in business and in management of organizations in general. Maslow adopted a strict satisfaction-progression requirement where a need must be first at least reasonably satisfied before higher-level needs become important enough for the individual to deploy resources to satisfy it. Alderfer believed this is not necessarily so. Progression upward from relatedness needs, for example onward to growth needs does not necessarily presume satisfaction of existence needs or relatedness needs in the individual. Managers and leaders in organizations including two-person organizations can rest assured ongoing efforts to satisfy higher-level human needs lying within their locus of control or influence will hit the mark provided the effort aligns with one of unsatisfied needs the individual intrinsically views as important (Schneider & Alderfer, 1973).

2. If a person experiences ongoing unsatisfied higher-level needs, they may regress to lower-level needs, which are easier to satisfy. This phenomenon is known as frustration-regression and suggests an already satisfied need can be reactivated and become paramount again when a higher-level need cannot be satisfied (Standifer, 2013). When someone is frustrated when attempting to satisfy growth needs, relatedness needs or existence needs often resurface as key motivators, which can be utilized to help motivate and satisfy the individual. An example of frustration-regression self-talk would sound something like, “I may not be able to earn my Ph.D. this year, but at least I have great friends and a great family.” Then the individual strives harder to build relationships with existing or even new friends and cultivates relatedness goals with family.

3. Alderfer's ERG theory is more flexible than Maslow's; it allows for the order of needs to vary from individual to individual, which is important when implementing processes and policies based on the theory (Barnes, 2018). ERG theory allows for individuals like the starving artist who may deem existence needs to be less important than growth needs.

Rather than the strict hierarchy of Maslow's (1943) theory, Alderfer's ERG theory frames motivation as more a range of needs with unique priorities. These priorities sometimes present themselves simultaneously and at other times oscillate among classes of needs or regress to lower-level needs based on frustration attaining needs at higher levels. ERG theory successfully informs business managers and organizational leaders including leadership in families that the others in the organization have multiple needs, which often need to be satisfied simultaneously. Leaders should be aware that frustration in attaining important higher level needs often results in others within an organization potentially regressing to behavior satisfying lower-level needs, which are more comfortable and easier for them to attain. This occurs even when lower-level needs are not consistent with the goals, aspirations, or needs of the overall organization, the team, or the family.

The ERG theory offers more flexibility than Maslow's. However, it does not have the granularity and measurement rigor of the acquired needs theory as a theoretical framework for measuring motivation and studying the success factors of two-person co-teaching teams as they relate to the motivation profiles of the individuals.

Herzberg's Two Factor Theory Also Known as Motivation-Hygiene Theory

Herzberg's two factor theory posits there are a set of conditions (or factors), which serve to increase the motivation of individuals in an organization and a second set of conditions (or

factors) which only serve to antagonize or diminish motivation when not present at adequate levels but do not serve to increase motivation beyond the neutral state (Herzberg, 1974). The theory is known as motivation-hygiene theory because the conditions or factors which, if inadequate, diminish motivation are similar to “hygiene” activities in the organization. For example, there are some conditions (hygiene factors) such as workplace safety, working conditions, harassment policy, and interpersonal interactions, which if deemed inadequate or worse unacceptable will crush all motivation regardless of the factors in play which may otherwise be off the chart incredible motivators. The same theory applies in two person organizations as well. Imagine a co-teaching team or a parent-child team where one of the two individuals had a style or engaged in behavior, which was overly harsh or worse—abusive. Regardless of the amazing benefits or other factors, which would otherwise highly motivate the other individual, the two-person team is doomed because basic “hygiene” factors are being ignored or even negatively used to control. Though hygiene factors may not motivate in of themselves, they are critical enablers of motivation and must be constantly maintained at adequate levels as perceived by the other person or people in the organization (Herzberg, 1974). Figure 3 describes the relationship between the two factors in graphic form.

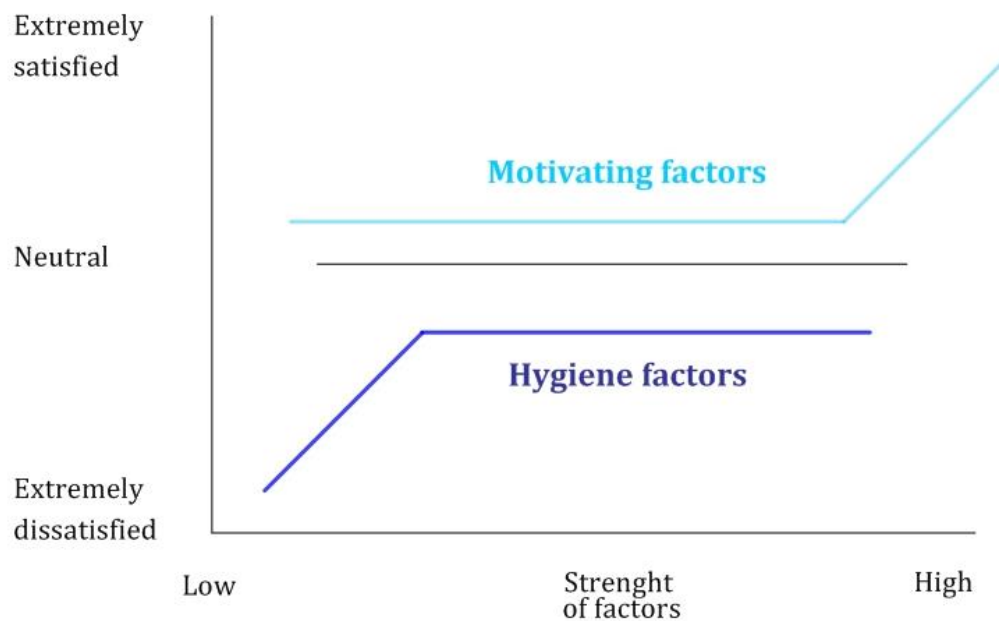


Figure 3

Graphic Representation of Herzberg's Two Factor Theory of Motivation

The literature on Herzberg's two factor theory of motivation is highly focused on business organizations and the management-employee relationships in organizations. Five predominant motivating factors and five predominant hygiene factors emerge (Sharma, 2016).

Herzberg's motivating factors (the five primary factors of job satisfaction) include:

- achievement
- recognition
- advancement
- responsibility
- the work itself
- others

Herzberg's (1974) theory suggests that though the above motivating factors drive satisfaction, people need an absence of *dissatisfaction factors*, which the theory labels *hygiene factors*. Herzberg's *hygiene factors* (the five primary factors of job dissatisfaction when inadequate) include:

- salary
- supervision
- company policy and administration
- working conditions
- interpersonal relationships
- others

It is interesting to note that many of the above hygiene factors align with the reasons why teacher attrition occurs and why teachers on average no longer persist for long periods in teaching careers (Sutcher et al., 2016). Teacher shortages and fewer people entering and pursuing teaching careers could possibly improve if administration leadership employed some practical, effective tactical implementations of Herzberg's motivation-hygiene theory.

Even though Herzberg's two factor theory is quite useful in practice, there are limitations, which are concerning (Hinrichs & Mischkind, 1967). The theory overlooks situational variables and the reliability has been questioned. Perhaps most importantly Herzberg (1974) presumed a correlation existed between productivity and job satisfaction without demonstrating the correlation and without a comprehensive measure of job satisfaction. Nevertheless, the theory does serve to inform leaders in any size organization who have implemented a variety of useful management processes and policies. Because of the aforementioned limitations, for the purposes of this study, McClelland's (1965) acquired needs theory is a better fit for the overall theoretical

framework even though Herzberg's (1974) theory is informative and useful as part of the body of knowledge in the area of human motivation.

Skinner's Reinforcement Theory

Skinner's operant conditioning theory led to the reinforcement theory, which asserts a person's motivation can be shaped by consequences of desired behaviors through both positive and negative reinforcements (Gordan, 2014). Positive reinforcements can improve the probability of the recurrence of desired behaviors. Examples of positive reinforcements may include money, promotion, awards, praise, appreciation, public recognition, good grades, etc. Even with lack of instruction or clarity around behavioral expectations, positive reinforcements serve to motivate individuals in organizations when they witness the reinforcements given to others or experience them first hand (Scharff, 1999).

Negative reinforcements are different than punishments in the theory and must not be confused with one another. According to the theory, negative reinforcements involve the removal of an unpleasant condition or state as a means of motivating desired behavior. An example of negative reinforcement would be providing shelter and food to the homeless and hungry provided they are not intoxicated. In this example, the unpleasant condition is hunger or being cold or hot. Those unpleasant conditions are removed under certain behavioral conditions—sobriety in this case. Punishment on the other hand is imposing a negative consequence for undesired behavior which lowers the probability of undesired behaviors. The reinforcement theory of motivation suggests that positive and negative reinforcements are more effective than punishment (Gordon, 1987). The reasons are threefold:

1. Punishment suppresses undesired behaviors, but seldom permanently stops it.

2. Punishment attempts to stop certain behaviors, but generally does not offer alternative behavior in of itself.
3. Punishment fosters negative feelings and attitudes in the individual toward the person administering the punishment and the activity in general.

To be effective, the theory states that positive reinforcements should not occur every time the behavior occurs because after the person has been conditioned after repetitive and consistent reinforcements, suspension or termination of the reinforcements result in a decline in motivation for the individual. Further, rewards should meet the individual's expectations and should be equitable while at the same time ensuring the desired behavior is clear and realistic.

For this study, utilizing Skinner's reinforcement theory as a framework would not be practical or effective because the research questions do not involve conditioning or reinforcement. The acquired needs theory is superior to the reinforcement theory for this case study because of the specific research questions posed.

Vroom's Expectancy Theory

Vroom (1964) adopted a process-oriented definition of motivation where motivation was reduced to a process controlled by the individual based on perception of how well the expected results of behavior correlates to desired results or eventually leads to desired results. Vroom posited this process of motivation governs choices among available options and is rooted in the belief by individuals that decisions will result in desired outcomes. Motivation therefore becomes the product of three factors: expectancy, instrumentality, and valance. Vroom believed this product was mathematical in that if any of the three factors were missing or could be measured and were zero for all practical purposes then the motivation of the individual being a

multiplicative product of the three factors would be zero. Meaningful levels of each of these three factors are necessary for motivation to occur.

1. *Expectancy* is the belief by individuals that effort invested will result in attaining the desired performance levels or performance goals. Expectancy is highly dependent upon the individual and has multiple inputs including past experiences, competence, self-efficacy, perceived control by the individual, and perceived difficulty in achieving the desired performance. A person's belief in their abilities or self-confidence in their skills and knowledge as to whether or not they are capable of performing the necessary behavior has a large impact on expectancy. Setting goals too high or expecting performance levels beyond their capability results in low expectancy and therefore low motivation (Sharma, 2016). If there is a belief the goals are unattainable, expectancy plummets. Lastly, if the individual perceives they do not have some degree of control over the expected outcome or is beyond their ability to influence, then expectancy and therefore motivation will be reduced or will be completely absent.
2. *Instrumentality* is the belief by the individual that the desired performance goals will result in a reward or the desired outcome. Rewards are not readily observable or objectively measurable as in the case of the sense of accomplishment for example. Instrumentality ties performance to outcome. When the same or too similar reward is given for all levels of performance, instrumentality and therefore motivation will be low. Trust and confidence in the people making policy, which ties performance to reward is important as is the consistent and fair application of the policy and procedures for measuring and rewarding performance (Vroom et al., 2015).

3. *Valence* is the intrinsic value the individual places on the rewards or outcomes and like expectancy is highly dependent upon the individual person. Internal sources of strength, personal values and one's needs, personal goals, and individual preferences all have bearing on valance. Valance can be positive, negative or zero. A person must prefer or at least welcome the outcome for valance to be positive and must not desire to avoid the outcome to keep it from being negative. Thus, a system or environment with high expectancy and high instrumentality can be undermined and actually go below zero motivation and demotivate an individual if they place negative value on the reward and consciously or unconsciously desires to avoid the reward or desired outcomes. For example, an administration which rewards teachers with larger classroom sizes along with higher pay may find itself at a loss to understand why its policies are not resulting in lower attrition or higher teacher satisfaction. Administrators may not value what their teachers value or may not be taking the time and effort to learn the valance profile of each teacher on an individual one-on-one basis.

Expectancy ties effort to performance. Instrumentality ties performance to outcome. Valance ties outcome to personal value. Vroom's expectancy theory has been used widely in business and management training circles for leadership development (Porter, 2006; Van Eerde & Thierry, 1996). Inexperienced or uninformed managers, school principals, and leaders in families often myopically focus on instrumentality to the exclusion of expectancy and valance. This is most likely because of the investment involved and intimacy required to properly understand the individual's unique makeup, which so richly informs and governs what they actually value and actually perceive in terms of self-confidence, perceived competencies,

difficulties, and perceived level of control. Unlike instrumentality, which can often be unilaterally influenced through consistent application of good policy, understanding expectancy and valence requires building closer, more mature relationships and safe environments where the values, vulnerabilities, and shortcomings of the other person(s) in the organization can safely be conveyed with trust and confidence.

Like the ERG theory, Vroom's (1964) expectancy theory offers flexibility, and it has been successfully employed in pragmatic operational applications within business organizations. However, it does not have the granularity and measurement rigor of the acquired needs theory as a theoretical framework for measuring motivation and studying success factors of two-person co-teaching teams as they relate to the motivation patterns of the individuals.

Adams' Equity Theory

Adams (1965) built upon Maslow's hierarchy of needs and the social exchange theory with equity theory of motivation, which suggests people constantly measure and carefully balance the inputs required for desired outcomes (or outputs). People are acutely aware of these ratios of output to input for themselves and others. When they perceive an inequality between their ratio and that of others, they behave differently based on the perceived inequity, often in ways consistent with low motivation. The mental comparison of input to output can be visualized by a highly sensitive balancing scale where *input* such as effort, skill, or time is on one side of the scale and *output* such as salary, recognition, or a good mark is on the other side of the scale. The sensitivity of the scale is generally very high for most people at any given time.

Simultaneously with measuring and evaluating their own ratio of output to input, the theory suggests people constantly compare and reference how others are benefiting from outputs the other receives as compared to the inputs of the other person. For example, if a teacher

observes others with a similar education and experience level receiving more favorable treatment or a higher salary or more recognition, they may become demotivated and may even abandon their career entirely for other options if the inequity is perceived to be systemic within the district, state, country or the entire industry. If a person perceives a referent other gaining more output for the same amount of their input, then the perceived inequity may cause the person to:

1. Reduce their input effort or the quality of their work.
2. Attempt to increase their output such as asking for a raise or better treatment.
3. Change the person being referenced to a different person.
4. Modify their opinion of the referenced person's efforts and outcomes.
5. Modify their opinion of their own efforts and outcomes.
6. Quit or abandon the situation or environment causing the inequity.

Adams' (1965) equity theory is often implemented in workplace environments and education environments where inputs and outputs are more easily observed and measured. However, the theory applies and has use in other organizations including small, close organizations like families, teams, and partnerships. Typical inputs and outcomes of Adams' equity theory are summarized in Table 1.

Table 1*Inputs and Outputs of Adams' Equity Theory of Motivation*

Perceived inputs people weigh on the balancing scale	Perceived outputs or outcomes people weigh on the balancing scale
Time	Admiration
Effort	Security
Trust	Salary
Education	Benefits
Experience	Sense of achievement
Sacrifice	Recognition
Loyalty	Reputation
Conscientiousness	Companionship
Commitment	Friendship
Tolerance	Comradery
Enthusiasm	Support
Adaptability	Responsibility
Flexibility	Praise/Thanks
Determination	Affection
Enthusiasm	Intimacy

Adams (1965) discussed equity theory in terms of an embedded theory of distributive justice 55 years ago and highlighted the injustice of the times between the races and genders in discussing the observed results of such inequities. It is worth noting, now 55 years later in 2020 and 2021, that the theory predicts the kind of behavior and emotions now being observed by both the disadvantaged and the advantaged. Adams (1965) referred to what was happening to the disadvantaged as deprivation and noted the result would be anger and rage. The theory predicts that upon realization, the advantaged would feel and express guilt. Adams was careful to not be overly influenced by Skinnerian rhetoric while at the same time making it clear the outcome of such inequity is highly undesirable social behavior. These predictions are interesting when reflecting upon 2020.

One of the shortcomings of Adams' (1965) equity theory is it does not explicitly provide for individual differences and unique personalized needs and values. What one person perceives

as equitable and fair based on their personality, needs and values, another may see as grossly inequitable. This shortcoming does not diminish the impact of the theory on society in terms of the importance of leaders and members of organizations ensuring equity is established and maintained. However, for the purposes of this study the lack of providing constructs for the differences among people makes it less desirable than the acquired needs theory as a theoretical framework for this research.

Locke's Goal Setting Theory

Locke (1968) found setting *specific* and *challenging* performance goals and obtaining *commitment* to the goals are significant determinants of human motivation. Locke's primary contribution and revelation was the power and importance of setting goals, which were both *specific* and *measurable*. General, non-specific goals such as, "do your best" or "improve the quality of the product" were found to be far less effective and less motivating than specific and measurable goals like, "implement changes needed to establish and maintain product failure rates of 0.01% by the end of this year." Locke found that goals, which were not challenging enough or too easily attained were not as motivating as goals, which aggressively but reasonably challenged the individual. Locke's research confirmed the more specific and the more difficult the goal, the harder people worked to attain it. In addition to goals being specific and challenging, it is important the individual *accepts* or *commits* to the goal. A goal is a vision of a future state, and effective goals, according to the theory, set forth and describe this vision of the future with specificity and in such a manner the individual perceives it as challenging. The theory posits it is important individuals commit to the vision—owning it to some degree and accepting it as their vision as well. Locke's pioneering research in goal setting in the late 1960s has led to our current

understanding of goal setting and implementation of very effective goal setting based performance improvement processes in organizations.

There are five principles in goal setting which improve motivational success (Soós & Takács, 2013):

1. Clarity: When goals are clear, the individual knows the vision of what the future looks like and has a better idea what to do as a result. When a goal is vague such as “be more assertive,” it is not easy to measure and is not motivating. The individual may not even know if they have accomplished it
2. Challenge: People are more motivated by challenging goals provided they are attainable and are not perceived as impossible or fantasy.
3. Commitment: To be an effective motivator, the individual must buy in to the goal and share the vision of the future state on a personal ownership level. When people are involved in setting the goals, they are more likely to buy in and own the goal.
4. Feedback: Ongoing visibility of interim progress while the goal is being attained is important to motivation. Practical examples may include milestones or markers, which instantly convey the individual is on the right track and progressing to the envisioned future state on the specific timeline detailed in the goal. Feedback provides individuals and leaders to provide even more *clarity*. Leaders and individuals can solicit and utilize feedback to clarify expectations and adjust as needed during the process of attaining the goal.
5. Task complexity: Individuals and leaders who do not constantly consider the complexity of the goal and associated tasks do so at their own peril. Revisiting the complexity of the tasks on an ongoing basis keeps the organization or individuals

from being overwhelmed on one extreme and bored and therefore demotivated on the other extreme.

Even though goal setting theory has been successfully implemented in business, academic, and interpersonal organizations, like equity theory it does not explicitly address individual differences in terms of values, personalities and needs. Therefore, even though it is useful in other areas, it was not selected as the theoretical framework for motivation in this study.

McClelland's Acquired Needs Theory

Because of the importance of the acquired needs theory to this study, this section of the literature review is more comprehensive and deeper than the literature review involving the other motivation theories. This section provides an overview of how McClelland's (1965c) acquired needs theory helps to explain underlying enablers of motivating achievement in organizations of all sizes and how certain operational constructs and processes stemming from the theory can be used to intentionally steer organizations of any size to better fulfill their purposes. It discusses the unique motive profiles of individuals based on McClelland's three primary measurable needs and how similarities or differences among individuals may affect working relationships. The literature refers to the motive profile most conducive to successful leadership as the *leadership motive pattern*. Literature concerning the *leadership motive pattern* of successful leaders is reviewed along with observed differences between men and women leaders. A review of the relationship between McClelland's three acquired needs and *organizational climate* variables is included. *Power arousal* and how to diffuse power arousal in organizations is discussed. And lastly, research on *leadership styles* and their relationship to *organizational climate* variables and McClelland's three acquired needs is discussed. This section concludes by addressing why the *acquired needs theory* was selected as the theoretical framework for this study.

Achievement, Affiliation, and Power

Building upon Maslow's work, McClelland (1965b) identified three human motivators, which can account for up to 95% of all social interactions especially in organizations—both large and small—including two-person organizations. Unlike Maslow, Alderfer and others, McClelland's theory posits these three motivators are actually needs, which are learned or acquired over time and become a persistent part of who we are. The theory suggests after Maslow's foundational physiological needs and basic safety and security needs are perceived to be met at levels acceptable to the individual, the needs for *achievement* (nAch), for *affiliation* (nAff), and for *power* (nPow) then serve as dominant primary motivators. Even more importantly, these needs are uniquely learned and acquired individually, and subsequent research found these three primary driving needs can be intentionally suppressed, and they can be intentionally aroused or enhanced (Brunstein & Heckhausen, 2018; Fodor & Wick, 2009; McClelland, 1965a, 1966; Spencer, 2017). Whether it is intentional and systematic or fortuitous, the arousal of desirable motivators (such as enhancing the need for achievement) and the suppression of undesired motivators within organizations or entire societies are powerful and enable what McClelland called *the achieving society*. McClelland and followers further researched the theories attempting to answer important motivation questions as:

- What motivates an achieving society or an achieving organization?
- Why are some societies able to produce great historical figures, entrepreneurs, scientists, and writers when others just barely manage to survive?
- Why are some organizations filled with creativity and innovation or thrive with operational excellence while others struggle to remain viable?

- Why do some marriages, families, or partnerships achieve greatness while others fall apart?

The researchers attempted to determine if the answers to these questions were random luck or fortune or if instead there is a particular climate or environment, which motivates greatness, excellence, and achievement in a persistent manner. This study seeks to understand the degree to which these same climate or environmental variables may be present in successful co-teaching relationships.

Recall McClelland's definition of motive first mentioned in Chapter 1 as *the recurrent concern toward a goal state or condition, measured in fantasy, which drives, directs or selects the behavior of the individual*. Based on the working definition of motive, McClelland (1965a) identified these three measurable constructs leading to three variables named nAch, nAff, and nPow. The acquired needs theory suggested each of these can be further separated into personalized and socialized components. Personalized power and socialized power have particular importance in the theory and in operational implementations and processes stemming from the theory (Magee & Langner, 2008). Table 2 summarizes these three motivation constructs.

Table 2*Working Definitions of nAch, nAff, and nPow*

nAch <i>Need for achievement</i>	nAff <i>Need for affiliation</i>	nPow <i>Need for power</i>
A recurrent concern toward the goal state of accomplishing meaningful or important things in one's life or with one's time. Note: The need for recognition of accomplishments often falls within nPow – not nAch. Similarly, the need to accomplish something because it is important to others often falls within nAff – not nAch.	A recurrent concern toward the goal state of having and maintaining meaningful or fulfilling relationships with others. Note: The need for recognition for having good relationships often falls within nPow – not nAff. Similarly, the need for having relationships others deem important often falls within nPow – not nAff particularly if the recurrent concern in question involves influence or self-aggrandizement.	A recurrent concern toward the goal state of influencing others. nPow includes recurrent concerns for one's own reputation, image, or position. This often includes the need for recognition from others including status symbols. <i>Personalized power</i> or nPowP involves a recurrent concern toward influencing or controlling others for personal gain or self-aggrandizement. In contrast, <i>Socialized power</i> or nPowS involves a recurrent concern toward influencing or controlling others for the greater good or the general welfare.

Most individuals within organizations in economically developed societies generally have the basic needs associated within Maslow's first two levels met. This is particularly true when taking the perspective of organizations with business, social, or educational purposes. Even though there are exceptions, the social safety nets and the political and social fabric of these countries generally provide for the basic well-being either through capitalism, employment, and direct government intervention. McClelland (1965b) suggests in the cases where foundational needs are mostly met, the behavior of individuals and thus organizations are predominantly directed and selected by nAch, nAff, and nPow and further explained by nPowS and nPowP. It is therefore useful to measure nAch, nAff, and nPow as well as nPowP and nPowS when possible and better understand what patterns or profiles are most associated with successful leaders within businesses and organizations. Using the thematic apperception test (TAT), the relative strength of nAch, nAff, nPow, nPowS, and nPowP can be measured, numerically represented, and

graphically displayed. The result is a motive pattern or profile unique to the individual, and the pattern associated with successful leaders leading successful organizations is known as the *leadership motive pattern*.

The Leadership Motive Pattern

The acquired needs theory suggests that even though the need for achievement, affiliation and power are learned or acquired, they persist and become more and more of a persistent trait of individuals with time and age along with their socialized and personalized components (nPowS and nPowP). Even though the motive profile persists, specific needs in individuals and across organizations can be skillfully enhanced or suppressed. Further, the theory predicts certain motive profiles correlate with success or failure in various roles in life. For example, follow-up research involving the acquired needs theory predicts that successful managers and leaders in various organizations tend to have a specific *leadership motive pattern* (LMP; McClelland, 1985; McClelland & Boyatzis, 1982). The theory predicts and the research confirms the more successful and higher-level leaders will have a motive pattern very high in nPow, low in nAch, and low to moderate in nAff. Thus, leaders and people in higher level positions have many more recurrent concerns toward the goal state of influencing others than they do about affiliating with others or accomplishing or achieving by their own hand. Other interesting patterns stemming from the acquired needs theory have emerged related to gender.

The Leadership Motive Pattern and Gender

A 12-year longitudinal study with 211 males and 180 females entering a large company beginning in 1977 and ending in 1990 (Jacobs & McClelland, 1994). The participants were followed and recorded as to how far they advanced into higher and higher management levels over time within their organizations and within the larger corporation. The TAT was

administered and protocols scored for nAch, nAff, nPow and activity inhibition, which is an indicator of the degree of the need for socialized power (nPowS) to the need for personalized power (nPowP). Some interesting patterns were observed.

First, even though there were no gender differences in motivation predictors of attained high level positions, the study revealed two distinct styles of power, which distinguished the successful men from the successful women. Successful men and women both scored high on nPow as the theory predicted. However, successful men mainly used *reactive power* themes and successful women mainly used *resourceful power* themes. The higher the men and women were within the corporate ladder, the more pronounced the differences. Managers who remained at lower levels did not have significant differences between males and females. It is interesting to note that managers at lower levels regardless of gender exhibited higher levels of *helpless power* themes.

What distinguishes *resourceful power*, *reactive power*, and *helpless power*? In addition to delineating between nPowP and nPowS, the coding system for the TAT administered in this longitudinal study also measured the following:

1. *Resourceful power*, which is scored when a person in power or authority acts on behalf of another person by protecting, supporting, inspiring, teaching, leading, or otherwise promoting the welfare of another in a positive manner.
2. *Reactive power*, which is scored when a person engages in aggressive or assertive action against someone, which is usually an authority figure or someone else perceived to have power. *Reactive power* differs from *resourceful power* in that people with power or authority are often viewed negatively as hostile, evil or incompetent rather than benevolent or helpful.

3. *Helpless power* which is scored when a person feels the need to exert power or fix a situation but lacks the resources, ability, or will to act.

This means that high level successful men and successful women were both interested in and highly motivated by power (high nPow), they thought about it differently. Males tended to have recurrent concerns related to power, which had negative connotations and aggressive or assertive behavior associated with those in power as though they needed to be conquered or overcome. In contrast, females tended to have recurrent concerns related to power, which were more inspirational and nurturing like using power to improve the welfare of others and viewing power as a positive force as opposed to a diabolical or negative force to be overcome. In contrast, low level managers in the longitudinal study who were uninterested or unable to break into higher levels of management after 12 years tended to have recurrent concerns about power, which recognized the need for influence but thematically lacked the resources or skills needed to take action or correct a situation to make things better. The study made no conclusions about the reasons why these differences existed, only that they were found in 1990 in this corporation using a fairly robust methodology and chi-square and correlation analyses.

The second interesting pattern from this longitudinal study involved the absence of personalized power (nPowP) in the higher levels of management and the observable high levels of socialized power (nPowS) in the same managers and leaders. As expected, persons scoring high in personalized power tended not become managers, or did not remain managers, or remained at lower levels of management than subjects scoring low in personalized power. Personalized power should not be confused with reactive power. Reactive power can be and often is socialized power. In the TAT, high level managers who were men tended to thematically view authority and others with power as negative—even evil or diabolical. In these TAT

responses, power was exerted for the common good of others; the evil empire was overcome for the general welfare and the best interest of everyone when measured using the TAT.

The third pattern worth noting was reaffirmation of the predicted *leadership motive pattern*. Subjects attaining higher levels of management had a clear *leadership motive pattern* with a high need for power, low need for affiliation and low to moderate need for achievement. Seventy-nine percent of the higher-level managers studied had the *leadership motive pattern*, and there was no significant difference between men and women. Successful women exhibited the same *leadership motive pattern* predicted by the theory. Interestingly, managers remaining at lower levels tended to not have the *leadership motive pattern* with no significant difference between men and women. Fifty-nine percent of subjects remaining at lower levels had non-LMP profiles suggesting the *leadership motive pattern* predicts leadership success.

Motivating Achievement and Organizational Climate

In *The Achieving Society* (Davis & McClelland, 1962) data were presented showing the relationship between high need for achievement (nAch) and more entrepreneurial behavior by working people in the United States, Italy, and Poland. One reasonable interpretation mentioned is that it appeared young people with high nAch are predisposed to seek entrepreneurial related positions and careers where they are more likely to satisfy their needs for achievement more often than other professions. To confirm this interpretation of the findings, a longitudinal study was performed on 55 graduates of Wesleyan University spanning a period of up to 14 years after graduation to determine if significantly more graduates with high nAch persisted in careers considered to be entrepreneurial in nature than those with low nAch scores (McClelland, 1965b). This longitudinal study used the same definitions for entrepreneurial behavior as a 1961 study which found a significant positive relationship between high nAch and higher risk taking

behavior but could not determine a relationship between high nAch and the defined entrepreneurial behaviors (Meyer et al., 1961). Therefore, to help confirm what the Meyer et al. (1961) study did not, the criteria for entrepreneurial positions in this follow up longitudinal study included more responsibility than other positions for initiating decisions, more individual responsibility for the results of those decisions, and more risk taking in that there is more chance of a wrong decision being observed and being tied back to the individual. The findings of the study were striking: 83% of those who persisted in entrepreneurial positions were measured to be high in nAch as sophomores 14 years earlier and 79% of those who persisted in non-entrepreneurial positions were low in nAch as sophomores 14 years earlier. The chi-square was 8.70 which is highly significant ($p < 0.01$). This longitudinal study appears to confirm the economic development theory outlined in *The Achieving Society* that high nAch leads to people entering and persisting in entrepreneurial occupations where decision making, risk taking and innovation flourish.

What can be done to arouse, enhance, or support the n-Ach need for Achievement in individuals and within organizations including two-person organizations such as the MT/TC relationship? What can partnerships, and leaders in families and organizations large and small do to create an environment, which produces an achievement aroused, high performing organization, which better accomplishes their specific goals and purposes? *Organizational climate* in the literature refers to factors within the organization's culture which may influence people's motivation, desire and commitment toward the purposes and goals of the organization. Cultivating a favorable *organizational climate* leads people to want to produce or arouses latent needs or motives inspiring people to produce great results and achieve the specific purposes and goals of the organization (Litwin & Stringer, 1968). To the degree the *climate* of the organization

can be brought into alignment with certain favorable conditions, the achievement motive or need for achievement can be aroused according to Litwin and Stringer (1968).

As colleagues of McClelland, Litwin and Stringer began to build upon McClelland's research of the motive patterns of leaders and leadership style as antecedents to organizational climate. They began with the assumption that the degree to which an organization of any size successfully accomplishes its purposes and meets its goals are dependent upon the behavior of the people within the organization, and the strongest determinant of the people's behavior is the degree to which their motives are aroused or suppressed. Litwin and Stringer (1968) hypothesized that various organizational climate conditions either stimulate or suppress certain motives and that it is predominantly the *style of leadership*, which creates the *organizational climate*. Their hypothesized value chain between the leadership's style and the ultimate results of the organization is illustrated in Figure 4 below.

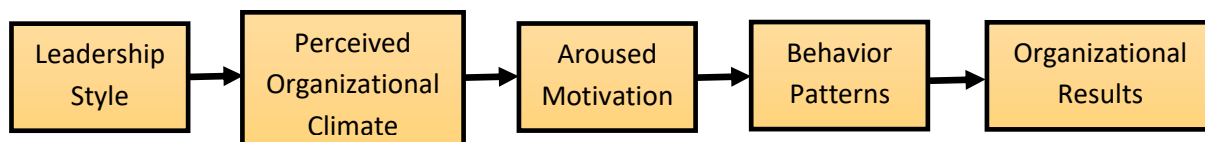


Figure 4

The Relationship between Leadership Style and Organizational Results

Litwin and Stringer (1968) experimented with different variables to measure organizational climate to test their hypothesis. Their experiments helped them further refine the definition of *climate* and develop a subset of measurable variables in the organization's culture, which directly influenced motivation. The following are their initial organizational climate variables:

1. *Conformity* which is the perceptions members of the organization have regarding constraints or rules, regulations, or procedures, which must be followed. Is there a loose, informal atmosphere (low conformity), or is there a high degree of rigid structure or channels, which must be followed to get things done (high conformity)?
2. *Responsibility* which is the perceptions the individuals have of being accountable and self-directed for their own work. Does the climate lend itself to having to double check decisions (low responsibility), or does the climate give individuals the feeling they are their own boss and have the freedom to do their job or perform their role within the organization independently without the need to check with authority?
3. *Standards* which is the perceived importance of implicit and explicit goals and performance expectations. Is the climate such that there are challenges represented by individual and group goals with an emphasis on doing a good job (high standards), or is the climate loose on performance standards and perhaps more about who you know rather than what you know or how you perform (low standards)?
4. *Reward* which is the perception by individuals that they will be rewarded for work well done whether the reward be monetary as in the case of a business organization or other forms of reward or recognition (admiration, appreciation, affection, etc.). Do members feel the climate emphasizes positive rewards, which are fair (high reward), or is the climate more of a punishment environment when mistakes are made (low reward)? Is it the *carrot* or the *stick*, which is being used?
5. *Risk* which is the sense of challenge and riskiness in the job or role within the organization. Does the climate emphasize and reward taking calculated risks (high),

or is playing it safe, the best and most prudent course to keep one's job or sanity (low)?

6. *Conflict* which is the perception by members that managers/leaders are interested in differing opinions. Is there a sense that it is good to get problems out in the open and work through constructive contention in a positive manner (high conflict), or is there a climate where smoothing things over or sweeping issues under the rug is the way to be effective and get results (low conflict)?
7. *Support* which references the feeling managers/leaders and other employees/members in the group are helpful and supportive. Is there an emphasis on mutual support from above and below (high support), or is it every person for themselves with a feeling that people do not support one another (low support)?
8. *Warmth* which is the perception of a friendly non-hostile climate with good fellowship prevailing in the group. Is there a prevalence of friendly and informal social groups (high warmth), or is the environment cold or calculating (low warmth)?
9. *Identity* which is the feeling that members *belong* to the organization and are a valuable member of a working team. Is there a climate in which members wear the badge proudly and it becomes part of who they are (high identity), or does the climate result in the feeling this is just their job and they do not think about it much or talk about it much (low identity)?

Achievement Arousal and Power Arousal

Litwin and Stringer (1968) evaluated the validity of their climate variables and tested their hypotheses across various research projects involving many different organizations in

multiple industries including military, production, research, sales, and computer electronics. Several important conclusions emerged.

First, when they did find significant statistical differences between organizations based upon certain climate variables, they found corresponding significant statistical differences in n-Ach (the need for achievement) within the workforce. In one study, two sales organizations from two different companies in the same industry were found to have significant differences in the conformity, warmth, and support variables. The organization whose leadership fostered lower conformity and higher warmth and support was found to have higher need for achievement (*achievement arousal*). Further, when the sales forces were rated as to performance, the higher n-Ach organization scored higher in performance measures. This and other research suggest the right-hand side of the Litwin and Stringer's (1968) value chain in Figure 4 above appears to be confirmed. Organizational climate was observed to predict motive arousal which was observed to predict individual and ultimately organizational results.

Second, their findings suggest leadership style predicted organizational climate concerning the left-hand side of their value chain illustrated in Figure 4. To test the influence of leadership style on climate, Litwin and Stringer (1968) set up experiments involving three simulated business operations where they could control some of the random variables. The subjects were carefully assigned and spread evenly between the three organizations to ensure an even spread based on various talent, experience, psychological, and demographic variables. Because a primary output measure was motivation arousal, particular attention was given to carefully matching initial motivation pattern scores between the three organizations for nAch, nAff, and nPow. Three leaders were assigned to be the CEOs of these simulated organizations. Leader A was given instructions to strongly enforce a formal structure with rigid rules (high

conformity). Leader B was given instructions to initiate a loose informal structure (low conformity) with a friendly, supportive, and cooperative team environment (high Warmth and Support). Leader C was given instructions to focus on productivity and encourage members to set their own goals and take responsibility for their own results (low conformity, high responsibility, and moderate to high standards). Over a two-week period working every day, observations were made throughout the day and feedback was given to the three leaders so they could clearly see the degree to which they were successfully implementing the desired leadership styles and adjusting accordingly real time. This real time feedback enabled the leaders to maintain their assigned leadership styles each day throughout the experiment.

Litwin and Stringer (1968) hypothesized the style of leader A would result in *power arousal* and suppress the need for achievement and affiliation. If their predictions were correct leader B's style would arouse the need for affiliation and suppress the need for power. Leader C's leadership style would arouse achievement and have no measurable effect on the need for affiliation or power within the organization.

The results confirmed some but not all of their hypotheses. The coaching leadership style of leader C aroused the achievement motive in the organization significantly more than the styles of leaders A and B. Also, the domineering leadership style of leader A and the placating leadership style of leader B both aroused the type of personalized power motive which is often destructive and counterproductive in many organizations. Finally, there were no significant differences in arousal of the affiliation motive among the organizations in this experiment.

Based on their ongoing research on the relationships between leadership style, organizational climate, and success, Litwin and Stringer (1968) eventually reduced their climate variables from nine to six. They combined their climate variables support, warmth and identity

into one called sense of team or *team spirit*. The original risk and conflict variables were combined, expanded, and renamed *clarity*, which is the belief that leadership is open and transparent, that acceptable risks are clearly communicated, and problems encountered can be openly discussed and issues clarified and resolved. Thus, the resulting final six climate variables are *conformity, responsibility, standards, rewards, clarity, and team spirit*.

Power arousal is often destructive particularly when it is personalized power being aroused (Litwin & Stringer, 1968). In a power aroused organization, the capacity to cope with one another or perform as a team is often greatly diminished sometimes for long periods of time – sometimes indefinitely. *Power arousal* can be particularly destructive in two-person and small, close organizations like marriages, families, partnerships, small groups and businesses. Litwin and Stringer (1968) believed that the answer to diffusing *power arousal* in any organization lies in the skillful arousal of McClelland's (1965a) affiliation motive *nAff*. Leadership styles and individual decisions to focus on the relationships between members of the organization make it more difficult for runaway *power arousal* to take hold. The best friend of *power arousal* is a leadership or operating style characterized by domineering, attacking, or oppressing others in the organization. Humility is *power arousal's* worst enemy. Destructive *power arousal* often can be diffused and defeated when one or more individuals in the organization are well-informed regarding *power arousal* and able to recognize it when it happens and then intentionally and skillfully arouse the need for affiliation in others while simultaneously demonstrating humility, surrender, and submission to one another for the greater good.

The Impact of Leadership Styles on Climate and Motivation

Building upon the work of Litwin and Stringer (1968), researchers at McBer and Company conducted multiple large studies, which further confirmed and expanded Litwin and

Stringer's findings (Kelner et al., 1994). Over 3,700 managers at all levels were studied in multi-national companies spanning nine industries over a period of six years beginning in 1986. The following six leadership styles were observed:

1. *Domineering* is a leadership style which when taken to an extreme enforces a high degree of immediate compliance, strong controls with rigid rules, and provides an abundance of negative corrective feedback.
2. *Governing* communicates the long-term vision and strategy, accepts input and gives direction and both positive and negative feedback in a balanced manner.
3. *Placating* places people's feelings at equal priority with goals and tasks supporting those goals, prioritizing harmony and peace sometimes at any price, and giving exclusive positive feedback often unrelated to performance.
4. *Involving* prioritizes inclusion and collaboration, seeks commitment, empowers members of the organization to act, and gives positive feedback for adequate or mediocre performance rather than being adept at differentiating people based on their measured level of performance.
5. *Soloing* is generally characterized by the inability to delegate or difficulty with delegating, operating alone at their own high standard, sometimes ignoring controls, and giving little to no feedback at all.
6. *Coaching* prioritizes development of employees and others for their long-term benefit, empowers others to learn and improve, and gives balanced, consistent, helpful feedback on performance improvement.

The findings of the study showed significant positive correlational relationships between Litwin and Stringer's (1968) six organizational climate variables, McClellands (1965) three

primary motives, and the above six leadership styles. Specifically, the study found a significant negative correlation between the domineering and soloing styles of leadership and the achievement motive. In other words, domineering and soloing styles of leadership was related to suppression of the achievement motive. Further, higher achievement climates correlated with coaching, governing, and involving styles of leadership; those styles of leadership predicted an achievement aroused climate.

With regard to the measured impact of leadership style on Litwin and Stringer's (1968) six climate variables within these teams:

1. The *domineering* style increased conformity, decreased responsibility, had no measurable effect on standards, and decreased rewards, clarity, and team spirit.
2. The *governing* style decreased conformity and increased responsibility, standards, rewards, clarity and team spirit. Note that the profile of low conformity, high responsibility, moderate to high standards, high rewards, high clarity, and high team spirit is consistent with an achievement aroused climate according to the research.
3. The *placating* style was observed to increase all six climate variables.
4. The *involving* style similar to *governing* decreased conformity and increased responsibility, standards, rewards, clarity, and team spirit.
5. The *soloing* style decreased conformity, had no effect on responsibility, and decreased standards, rewards, clarity and team spirit.
6. The *coaching* style decreased conformity, had no effect on responsibility and increased standards, rewards, clarity and team spirit, also consistent with an achievement aroused climate.

Further, differences in leadership style accounted for between 54% and 72% of the variance in the six climate variables. The McBer and Company studies (Kelner et al., 1994) served to help confirm Litwin and Stringer's (1968) entire value chain: *Leadership style begets organizational climate. Organizational climate begets motivation arousal (or suppression). Motivation arousal (or suppression) begets behavior. Behavior begets results.* Sow a style, reap a climate. Sow a climate, reap a motive. Sow a motive, reap a behavior. Sow a behavior, reap a result.

Acquired Needs Theory Conclusion

The acquired needs theory is a good fit for the theoretical framework of this case study. It is applicable to organizations of all sizes including two-person organizations like the MT and TC co-teaching team. A broad range of research has been conducted, which ties the acquired needs to performance and outcome. The thematic apperception test employed in the methodology, Chapter 3, has been widely used in research. Operational implementations of the theory in business and other organizations are plentiful, but lack application in MT and TC co-teaching pairs. Therefore, the acquired needs theory was used to evaluate and study the motive patterns of selected MT and TC teams to help answer the research questions for this study.

Co-teaching and the Global Pandemic

“This Covid-19 outbreak has challenged and disrupted everything that we normally take for granted in the preparation of teachers” (Tsui et al., 2020, p.1)! Nearly all fields and all professions world-wide have been impacted by the global pandemic—perhaps only a few more than teaching. As a result, practitioners are innovating new ways of operating. Tsui et al. (2020) pointed out that teachers are in survival mode during this pandemic, and the authors compared innovation occurring in the teaching profession during the pandemic to natural selection and

evolutionary improvement in the natural world. The authors of this Hong Kong study (Tsui et al., 2020) emphasized the opportunistic nature of survival in the natural world is akin to teachers struggling to survive in the Covid-19 world. Teachers grasping one new opportunity after the next afford the emergence of new ideas which undergo continuous processes of ever improving evolutionary change in the teaching profession provided they are in a healthful environment similar to the natural world. This healthful environment or *climate* of the organization where innovation and continuous evolutionary improvement thrives should sound somewhat familiar given the previous section of this literature review discussing organizational climate grounded in the acquired needs theory. Yes, teachers are struggling to survive in this new world rocked by the need to implement simultaneous in person and remote learning while risking their own health doing so. Yet, it is this kind of struggle and this kind of need to cope with the challenges of the pandemic, which affords new emergent practices and yet undiscovered best practices. Like the ever-mutating virus, teaching must adapt even faster than the virus. Where there are teachers struggling to survive, new emergent best practices are likely to thrive (Tsui et al., 2020).

Co-teaching is a byproduct of evolutionary improvement and has a rich history. The team-teaching model of co-teaching can be found in the literature as early as the mid-1960s with referenced implementation of co-teaching teams as early as the 1950s (Trump, 1966). Interestingly, when discussing improving the quality of teaching and referencing team teaching, Trump (1966) listed the three most important activity objectives teaching should seek to accomplish: The first was to “motivate” students (p. 87). Modern implementations of co-teaching evolved out of legislation in the 1990s. In the middle of the decade Cook and Friend (1995) framed the definition of co-teaching, which serves as the operational definition for this study: Two teachers working together in a single classroom to deliver substantive instruction to diverse

or blended group of students. At the end of the decade Buckley (2000) emphasized co-teaching as a broader team model where multiple teachers work together to deliver purposeful, regular, and cooperative teaching to groups of students over a period of years. Murawski (2003) then posited co-teaching involved the inclusion of co-planning, co-instruction, and co-assessment. More recently, Pettit (2017) emphasized that a quality relationship and a high degree of trust must between the co-teachers must be present to realize the full benefits of co-teaching.

During the Covid-19 pandemic, to reach and teach their students, teachers must rely heavily on technology, remote communication, and computer skills. In doing so during the extended crisis, chasms have been observed in the efficacy of the student/teacher interaction, and worse, the quality appears to be based on the students' ability, socio-economic status, ethnicity, and home language (Chizhik & Brandon, 2020). Chizhik and Brandon (2020) proposed that online co-teaching relationship between a MT and a TC could result in more productive instruction, better structure, and more equitable instruction. They describe various co-teaching models and discuss how each can better support the needs of diverse students in a remote learning environment where they otherwise are not prone to thrive in their learning. Additional new tools and processes are needed which are more effective in drawing out strengths in each teacher within an online environment. These new tools and processes are necessary to build better teacher collaboration and agency (Chizhik & Brandon, 2020)..

Co-teaching is not a recent invention; however, implementing co-teaching as part of the student teaching experience is relatively new (Bacharach et al., 2010). The traditional model of student teaching has not significantly changed in more than 100 years (Guyton & McIntyre, 1990). Quantitative and qualitative research found co-teaching to be effective in improving student learning. Bacharach et al. (2010) completed a four-year mixed methods study at a diverse

school district in the Midwest which included 1,652 people (826 co-teaching pairs). In each of the four years studied, there was a statistically significant increase in academic performance reading and math proficiency for students experiencing co-teaching as compared to students who did not experience co-teaching. Even more compelling were the findings between classrooms utilizing the traditional student teaching model and classrooms using the co-teaching student teaching model. Students who were in classrooms with student teachers in a co-teaching relationship statistically outperformed classrooms with student teachers in the traditional 100-year-old model. The qualitative findings of this mixed methods study supported the use and benefit of co-teaching. Students reported co-teaching was a positive experience and they experienced increased teacher engagement and support for their learning needs. The study clearly established the co-teaching model for student teaching had a positive impact on students' academic achievement.

Maintaining and improving the motivation of struggling teachers seems a worthy objective. There appears to be a gap in the literature surrounding the impact of the pandemic specifically on the motivation of teachers in a co-teaching arrangement. Better understanding the stories from teachers in co-teaching relationships during this pandemic will make a contribution to the body of literature—particularly concerning the motivation of individuals in the unique two person organizations operating in the middle of unprecedented challenges and crises.

CHAPTER 3: METHODOLOGY

The purpose of this study was to identify and understand what factors contributed to the success of highly rated co-teaching experiences for the participants. Additionally the purpose included understanding to what extent those success factors were related to the measured underlying motives of the participants as defined by and measured within the context of the acquired needs theory of motivation. The purpose included understanding these factors within the context and impact of the current Covid-19 pandemic and resulting online learning. With these purposes in mind, this chapter begins by discussing the philosophical foundation and research design needed to answer the following research questions.

1. What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (the “success factors”)?
2. Are there any common success factors between the MT/TC teams studied?
3. Are any of the success factors related to the three motivation constructs being studied—being the affiliation motive, achievement motive, and power motive (as defined) of the TC or MT?
4. What do the TC and MT believe about how their own measured motives contributed to the success of the co-teaching experience?
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

Following the philosophical foundations of the methodology, the type of case study selected will be addressed along with rationale for its use. The research site, participant selection, and data collection methods are discussed, followed by methods for data analysis. This chapter concludes with a summary of researcher positionality and limitations of the study. As with

anything of value, the foundation upon which it is built is among the most important considerations.

Philosophical Foundation

The selection of specific research methods should not precede understanding and analyzing foundational philosophical assumptions and paradigms involving ontology, epistemology, axiology, and the rhetoric for the study (Creswell & Creswell, 2018). The ontological perspective is foundational—asking about the nature of reality—whether reality is subjective and multiple as seen by the participants or truly objective and detached from the perspectives and interpretations of the participants. Given the problem statement, the research questions, and the nature of the environment and inquiry, the subjective ontological paradigm was embraced for this study.

The epistemological perspective asking about how we come to know reality and the nature of the relationship between the researcher and what is being studied is vastly different between a positivist approach and an interpretivist approach. Positivism often seeks to distance or even lessen the biases and influence of the researcher where interpretivism recognizes the necessity of the researcher to be in the field trying to get as close as possible to the participants where they live and work to understand them and their interpretations and experiences. Willis (2007) emphasized that in many cases when studying individuals and organizations the researcher cannot be extracted from that which is being studied. Willis (2007) invited researchers to utilize their own assumptions, paradigms and biases to enrich the study because the researcher is sometimes embedded in the field with the participants even if only during inquiry. This leads to the analysis of the axiological assumptions, which seek to understand the role of values in the research. Does the researcher acknowledge that research is value-laden and that their biases are

present? Or does the researcher seek to remove or at least insulate their values and biases from the research? Given the research questions for this study, the problem statement, and the nature of the co-teaching organizational environment, it would be a mistake not to acknowledge and actively report the values and biases of the researcher and the value-laden nature of the information gathered from the co-teaching environment. Therefore, the corresponding rhetorical research language in the qualitative tradition found in the literature will be embraced including using first-person pronouns such as *I* and using metaphors and stories rather than typical quantitative terms and language often found in traditional quantitative research (Clandinin & Connelly, 2000).

I am by nature a person who instinctively processes the world through a post-positivism paradigm. I am inherently uncomfortable operating through other worldviews—even to the point of having difficulty writing in the first person which I will now do—following the rhetorical suggestions in the literature for the remainder of this dissertation when appropriate. One reason I selected and embraced this particular research study was to stretch myself into areas where I am well outside my comfort zone to learn more and build a better ability to see things differently and become a better researcher by doing a study outside of the quantitative methodologies where I am most comfortable. I am a mathematician, a scientist and an engineer. For decades my professional and academic careers have been steeped in the physical sciences and quantitative inquiry including a long career at Hewlett Packard and an advanced degree from Stanford University (CA) in electrical engineering and business management where reality was deemed to be completely objective and knowable. The interpretivism world view and the associated ontological, epistemological, and axiological assumptions are a challenge for me. In taking this *road less traveled*, I have grown and benefited greatly and am already seeing the world

differently because of stretching myself in these more uncomfortable areas. I am aware that my nature, values, and biases played a part in this study.

Qualitative research is concerned with understanding the meanings people have constructed within their experiences—how they make sense of their world and interpret their experiences (Merriam & Tisdell, 2015). Creswell and Creswell (2018) emphasized it is a requirement of good research to make the theoretical framework, assumptions, and paradigms explicit in the study and recognize how they shape the content of a qualitative project as does the researcher's worldviews, beliefs, and biases. The positivist may suggest including the researcher and their values and biases would serve to corrupt a study where interpretive communities and social constructivists view such things as inherently important and valuable to inform the inquiry and enrich the research.

Qualitative methods are used when the objective is to gain a deeper understanding of the perceptions of people regarding a particular phenomenon or their experiences in a particular situation (Merriam & Tisdell, 2015). This is precisely what this study attempted to accomplish. Qualitative research is the best choice when the objective is to study social processes in the context of their natural setting (Denzin & Lincoln, 2000; Esterberg, 2002). When exploring phenomenon in context, the case study qualitative method is the best approach to select as opposed to other qualitative approaches such as phenomenology, grounded theory, ethnographic, and narratives (Yin, 2014).

The decision to utilize the case study approach for this research is well supported by the literature on qualitative research. The interpretive theoretical perspective discussed in Chapter 1 (which served as both rudder and anchor for the study), and the conclusions of the literature

discussed in this section combined with the nature of the *what* and *why* research questions in Chapter 1, lent themselves to the selection of a qualitative case study for this research.

Research Design

This section discusses the rationale for the case study type selected and the data collection and analysis methodology.

Type of Case Study

Selecting the best type of case study is important. Yin (2014) posited there are three types of case studies: *exploratory*, *explanatory*, and *descriptive*. Exploratory case studies are used when asking *how* and *what* questions when there is no single set of outcomes. Explanatory case studies are used when asking *how* and *why* questions when the goal is to explain presumed causal connections, which may be too distributed or complex for more empirical methods like surveys or experimentation (Yin, 2014). In addition, comparative case studies may be employed when comparing two or more cases with the goal of determining *how* cases are alike and *how* they are different.

Stake (2010) added the *intrinsic*, *instrumental*, and *collective* types of case studies. *Intrinsic* case studies are employed when the goal is to better understand or more deeply investigate a specific case. *Instrumental* case studies are used when the objective of the research is to refine a theory or gain insights into a specific issue. The case may be a typical case or an atypical case because with *instrumental* case studies the case plays a supportive role helping to understand something other than the specific case. Stake's *collective* case studies are similar to Yin's (2014) *comparative* case study where multiple cases are examined for the purposes of comparing and contrasting them.

Based on the literature as well as the specific purpose of this study and the specific research questions discussed in Chapter 1, the *exploratory* type of case study was selected for this research.

Analysis

Case studies can be used to build or affirm theory. Theoretical constructs and proposals can be created from empirical evidence obtained through case studies (Eisenhardt & Graebner, 2007). Exploratory case studies can be used to build or affirm theory from research, and studying multiple cases provides a better basis for theory building because stronger theories emerge when they are supported by multiple cases (Yin, 2014). However, case studies often have a conceptual framework instead of a theoretical framework (Jabareen, 2009). By combining interlinked concepts which emerge from case study research, a comprehensive understanding of a phenomenon or phenomena can be realized. Jabareen's (2009) conceptual framework analysis presents a procedure or process of theorization based on the grounded theory method. Eisenhardt, Yin, and Jabareen agreed: Exploratory case studies can be used to develop or affirm theory, and methodologies exist to provide the rigor and process to do so.

The conceptual framework analysis methodology is an appropriate choice for this study. Jabareen's (2009) conceptual framework analysis of case study data has several advantages including its flexibility, its capacity for modification, and its emphasis on understanding rather than predicting. The conceptual frameworks should be analyzed with full awareness and explicit restatement of ontological, epistemological, axiological and methodological assumptions for the research because these assumptions—by definition—explicit concepts within the conceptual framework being analyzed (Jabareen, 2009). Jabareen believes the conceptual framework does well at providing understanding of the phenomenon being studied and can help with theoretical

explanation although to a lesser degree. The more effective conceptual frameworks are derived from inclusion of foundational discipline-oriented theories, which become an important part of the data set for the conceptual framework analysis. The point of the conceptual framework is to include and analyze the theory or theories framing the study to generate potentially novel interpretations and understanding.

In this study, the conceptual framework analysis method was employed (Jabareen, 2009), and because the acquired needs theory of motivation is the foundational theoretical framework of the study, the acquired needs theory of motivation became part of the data used for the conceptual framework analysis. Obviously, the data derived from interviews with the participants and the data from each individual's thematic apperception test became part of the conceptual framework analysis. All these data combined, including the philosophical assumption data, became inputs to the conceptual framework analysis methodology.

Data Collection Methodology

Case studies benefit from having multiple sources of data, which serve to provide a more comprehensive body of evidence making the study as robust as possible (Yin, 2014). Stake (2010) added that *triangulation* is essential to perform case study research, which is reliable and meaningful. *Triangulation* refers to a purposeful process of obtaining data from multiple sources with the goal of finding the confluence and convergence of these data. The result is much higher confidence of repeatability of an observation or interpretation as well as bringing clarity to the meaning of the data by identifying different ways the phenomenon is perceived (Stake, 2010). The data collection strategy for this study involved collecting data from the *thematic apperception test (TAT)* and collecting data from individual *interviews*. These two data collection

methods are discussed here in chronological order based on the timeframe when the data was collected during the study.

Thematic Apperception Test

Thematic analysis has become a widely-used tool for effectively analyzing qualitative data in psychology, social sciences, and beyond (Braun et al., 2019). Qualitative data collection is highly dependent upon interpretation, and thematic analysis is a comprehensive process enabling researchers to identify multiple linkages and cross-references among the data and the research's evolving or emerging themes (Alhojailan, 2012). Qualitative research is characterized by the merging of data analysis and interpretation and often by the merging of data collection with analysis; thus, there is an overlap of data collection, analysis, and interpretation (Cohen et al., 2011).

The thematic analysis tool used in this study to collect and analyze the acquired needs theory motive pattern data for the participants was the *TAT*. Collection of TAT data occurred in the summer, 2021 timeframe shortly after IRB approval. The TAT involved giving respondents a series of ambiguous pictures from which the respondents wrote a creative story about what is happening in the scene before them and in the lives of the individuals in the scene. The purpose of the test was to learn more about the recurrent concerns of the respondents—specifically recurrent concerns and recurrent thoughts toward achievement, affiliation, and power (both personalized power and socialized power). Respondents were asked to tell a story explaining what is happening in the picture including the events that led up to the scene, what is happening in the scene, what each of the characters is thinking or feeling, and what happens next. This occurred for each picture and is intended to reveal deeper subconscious recurrent themes of concern. Typically, the TAT is scored numerically by counting the relative number of clear

achievement oriented, affiliation oriented and power-oriented concerns or goals the writer brings to life on paper from fantasy/creative writing. Use of the TAT by practitioners typically involves between five and nine pictures depicting a variety of neutral yet provocative social scenes, which may include men, women, and/or children. The TAT results come in a form provided to the respondent as a numeric summary of the relative strength of their needs for achievement, affiliation, and power.

The TAT narratives written by the participants in this study were scored by a qualified firm certified in scoring TATs using standards developed and refined over time by McClelland and other researchers of the acquired needs theory (McClelland, 1999; Serfass & Sherman, 2013; Tuerlinckx et al., 2002; Winter & McClelland, 1978). The numerical results and the informative, personalized written summary in layman's terms were sent by email to each participant one week prior to the scheduled interview where the TAT results were discussed along with the other interview topics.

The TAT has been challenged as to scientific application, primarily centered on questions of reliability and specifically in the area of random error stemming from differences and disagreements among scorers leading to concerns with interrater reliability (Jenkins, 2017). Employing classical metrics such as interrater reliability and test-retest reliability sometimes suggest the TAT should be replaced with other measurement tools, which score better when evaluating reliability and validity. Jenkins (2017) posits that often, methods for assessing reliability and validity are erroneously misapplied to the TAT and that one must return to the original purposes and assumptions prompting the use of the TAT. Murray (1943) commented that lower scores for measures should be expected given the stories reflect the current mood and current life situations at the time the TAT is administered. McClelland (1985) argued that

classical test theory for establishing validity and reliability is not appropriate for the TAT as instability within scoring may be more construct-related than random error leaving the TAT useful for clinical and research purposes. Unlike long term longitudinal studies, researchers interested in the current state of a phenomenon or situation may not be interested or concerned with test-retest reliability particularly for case studies with small purposeful sample sizes (Jenkins, 2017). To reduce the risk of interrater reliability error, the firm scoring the TATs agreed to utilize a single scorer for all TAT responses for this study. The firm has been scoring the TAT for 43 years, and the rater the firm assigned for this study had been scoring TAT responses for more than 20 years.

Interviews

“Interviewing provides access to the context of people’s behavior and thereby provides a way for researchers to understand the meaning of that behavior” (Seidman, 2019, p. 10). Researchers who interview participants are afforded the benefit of putting behavior in context providing access to understanding their actions and their thoughts. Recall that the purpose of this study was to understand what factors contributed to the success co-teaching experiences for MTs and TCs and to what extent those success factors are related to the measured underlying human motives within the context of the acquired needs theory of motivation. The purpose includes understanding the success factors during of the Covid-19 pandemic. The words people speak are a microcosm of their consciousness (Vygotsky, 1962). These purposes were well served by employing interviews as part of the data collection.

Individual interviews were performed online with each participant. The interviews employed the *semi-structured* interview approach, which provided opportunities to discuss the necessary topics in-depth—guiding the conversation, while providing for flexibility to

investigate and pursue understanding of tangential or related topics the participant identifies as important (Creswell & Creswell, 2018). The interview guide in Appendix A is based on the research questions and was used as the overall structure to guide the interviews with questions inserted designed to prompt participants to give examples, which would provide context and broader meaning to their responses. Leading questions, yes/no dichotomous questions, and other closed questions were avoided in favor of open-ended questions, which are more effective for qualitative interview inquiry (Esterberg, 2002). Dichotomous questions intentionally used to provoke thoughts and frame the context for that part of the discussion were followed with *why* or *how* questions to allow the participant to expand in an open-ended fashion. These semi-structured interviews were performed once and were approximately 30 minutes in length, which is typical for these types of interviews (Dicicco-Bloom & Crabtree, 2006). Participants were asked in advance if they would approve the recording of the interviews. Upon approval by the participants, interviews were recorded on the Microsoft Teams platform for subsequent review and analysis. The interview protocol detailed in Appendix B was followed to provide consistency among the participants. A research protocol is essential in case study research (Yin, 2014). Probing questions and follow-up questions were asked as needed to prompt participants to elaborate or clarify meanings (Denzin & Lincoln, 2000).

Approximately one week prior to the interview, the participants received the written results of their motivation patterns as measured by the thematic apperception tests by email with a cover letter informing them the results can be discussed during the online meeting before the interview begins. The intentional, planned discussion of the TAT results prior to the actual interview was designed to establish rapport, relationship, and trust between the participant and the researcher, which is important to the efficacy of the qualitative interview inquiry (Seidman,

2019). Interviews were transcribed. The transcribed data was loaded into *NVivo* and analyzed to identify themes, trends, and commonality within and between the responses of the participants (Lincoln & Guba, 1985).

Participants

Purposeful selection was employed to select the participants for this study. Maxwell (2005) defined purposeful selection as “a selection strategy in which particular settings, persons or activities are selected deliberately in order to provide information” (p. 88) and emphasized purposeful selection as an effective strategy when the information being sought may not be as effectively obtained from other choices. Initially co-teaching teams teaching at Beattie Elementary School (“Beattie”) were prioritized for participation with a broader plan to open the pool of potential participants beyond Beattie in case the Beattie co-teaching teams declined to participate. Beattie co-teaching teams were given first opportunity to participate because additional insights may have been gained from this study which may have supported and informed the Beattie Evaluation Project done by Dr. Ann Sebald and Dr. Angela Lewis during the spring, 2021 semester. The purpose of the Beattie Evaluation Project is to better understand the co-teaching experience during the pandemic and its impact on the MTs, TCs, and the students in terms of their learning. It sought to understand and tell the story of how co-teaching supports and prepares TCs for both face-to-face and remote/hybrid teaching environments. The research questions for this study dovetailed nicely in a supportive and contrasting manner with those of the spring 2021 Beattie Evaluation Project.

All Beattie co-teaching MTs and TCs were asked to participate. None opted into the study. The alternative plan was implemented to broaden the pool of potential participants to include other elementary schools in northern Colorado provided they persisted in the co-teaching

experience long enough to qualify for the selection criteria of this study which was to rate the co-teaching experience as *successful* and persist in the co-teaching experience for at least 75% of the semester. The purposes of this study and the supporting research questions necessitate purposefully selecting participants who persisted believing the experience was *successful*. After broadening the pool of potential participants to 38 individuals, seven individuals opted into the study, which involved four co-teaching teams. In the fourth team, the TC opted in, but the MT chose not to opt in.

Research Site

The research sites for this study were the four northern Colorado elementary schools where each team was co-teaching. Three of the participating co-teaching teams were teaching kindergarten, and one team was teaching 3rd grade. Given the constraints of the pandemic, the research site for the interviews was Microsoft Teams as the interviews were performed online with the participants participating from their home. The participants completed the TAT assessments at home. The TAT is intentionally not proctored or timed. Official school and district web sites were reviewed to better understand the demographics and other details of each school. The schools were randomly labeled A, B, C, and D for the purposes of conveying demographic information without disclosing which participants were associated with them.

School A is a public school with a student population of 242 in grades K-5. School A's minority student enrollment is 57.4% with 48.3% Hispanic/Latino, and the student-teacher ratio is 14:1. The student population is made up of 51% female students and 49% male students. At School A, 78.5% of the students are on the free or reduced lunch program. There are 17 full-time teachers and no full-time school counselors at School A.

School B is a public school located with a student population of 428 in grades K-5. School B's minority student enrollment is 30.9% with 23.7% Hispanic/Latino, and the student-teacher ratio is 18:1. The student population is made up of 47% female students and 53% male students. At School B, 29.4% of the students are on the free or reduced lunch program. There are 24 full-time teachers and no full-time school counselors at School B.

School C is a public school with a student population of 450 in grades K-5. School C's minority student enrollment is 27.8% with 18.7% Hispanic/Latino, and the student-teacher ratio is 14:1. The student population is made up of 50% female students and 50% male students. At School C, 49% of the students are on the free or reduced lunch program. There are 33 full-time teachers and one full-time school counselors at School C. The school district identifies School C as *core knowledge* school following the *core knowledge* sequence by E.D. Hirsch.

School D is a private school with a student population of 337 in grades PreK-8. Tuition for School D ranges from \$23,000 to \$25,300 per academic year. School D's minority student enrollment is 10% with five percent Hispanic/Latino. And the student-teacher ratio is 7:1. There are 50 full time teachers at School D.

There are pros and cons of limiting the research site to northern Colorado elementary schools. The benefits include the opportunity to better understand the phenomenon being studied by removing variables associated with large variations in geographic culture and local government oversight including pandemic related restrictions (Prasad, 2015). It is primarily the relationship between the MTs and the TCs which was studied. Specifically, it was the success factors leading to persistence through the co-teaching experience and how the motivation of the individuals and the consequences of the pandemic impacted those relationships and success factors which was studied. The trade-off and potential disadvantage of limiting the geography to

northern Colorado is a reduction in broader applicability beyond the geographic area and demographic composition of this area.

Research Steps

This study followed a uniform research protocol to ensure the process results in data which are consistent with the research questions and the purposes and goals of the study.

1. Participants were invited to participate and were informed as to the nature of the study and data collection methods.
2. Thematic apperception tests were completed by each participant and results were sent to them followed up by oral explanation of the results in lay terms.
3. Interviews were conducted and recorded with permission of the participants.

Transcription of the interviews was outsourced to a third-party service, and transcripts were then verified for accuracy.

4. The data indicated above was transcribed and analyzed for emergent themes and trends using *NVivo*.

Trustworthiness

Transparency in research procedures is very important for establishing trustworthiness and credibility (Bloomberg & Volpe, 2008). Trustworthiness begins by triangulating data and establishing a chain of evidence (Yin, 2014). Yin (2014) posits that multiple sources of data broadens the range of perspectives, attitudes, and behaviors.

To maximize the trustworthiness of this study, multiple sources of data were used as confirmation of emergent findings. Timeline details are provided in the results in Chapter 4 to increase dependability and provide other researchers the opportunity to evaluate transferability of the results (Merriam & Tisdell, 2015). Additionally, Merriam and Tisdell (2015) recommend

critical self-reflection by the researcher (*reflexivity*) to evaluate the researcher's biases, assumptions, and relationship to the study and allowing substantial time (*engagement*) to collect data so that it becomes saturated and more trustworthy. These additional techniques of *reflexivity* and *engagement* were employed in this study.

Being steeped in post-positivism and quantitative inquiry by nature, I struggle with not having numerically verifiable methods of ensuring reliability and internal and external validity when performing qualitative research. However, I have found reassurance in Guba's (1981) four constructs for establishing trustworthiness of naturalistic inquiry:

- credibility (in preference to internal validity)
- transferability (in preference to external validity)
- dependability (in preference to reliability)
- confirmability (in preference to objectivity)

Rather than numerically determining internal validity (whether the study measures or determines what is actually intended), for qualitative case study applications Merriam (1998) instead suggested *credibility* by determining how congruent the findings are with reality. *Credibility* is one of the most important contributors to trustworthiness (Lincoln & Guba, 1985). The methodology and specific design for this study seeks to do the following, each of which contribute to establishing *credibility* of the study (Shenton, 2004):

- adopt well-established methods
- develop familiarity with the culture of the participating organization
- employ triangulation in data collection
- utilize iterative questioning
- frequently debrief with advisors

- employ reflection to examine biases and assumption

Numerical measurements of external validity seek to establish the extent to which results can be applied or generalized to other situations or a wider population. However, qualitative research, including this study, was generally limited to a relatively small number of individuals in particular environments. In lieu of numeric measurements of external validity, qualitative researchers focus on the *transferability* of their research (Guba, 1981). For this study, information enabling the potential transfer of the study to other organizations was provided including the timing of events, information on specific participants and data collection methods.

Positivist reliability measurements concern themselves with the demonstrating that if the same process of research was repeated using the same methods, within the same context and with the same participants, similar results would be obtained. In qualitative inquiry the changing nature of the phenomenon being studied is often problematic for similar repeatability, so establishing *dependability* replaces reliability measurements. For this study, overlapping methods were utilized, and the research process is provided in sufficient detail to establish *dependability*, allowing future researchers to replicate the work.

Confirmability is the qualitative researcher's comparable concern to objectivity. *Confirmability* seeks to establish that the findings are indeed the result of the phenomenon involving the thoughts, behaviors, and experiences of the participants and not that of the researcher. This study utilized triangulation, a discussion of limitations and shortcomings of the study, and an open honest discussion of the researcher's values, biases, and assumptions, which all serve to establish *confirmability* (Shenton, 2004).

Researcher Positionality

Trustworthiness and credibility are rooted in the researcher's being aware of personal

biases, which could impact the study and then discussing those biases and how they may impact the research (Yin, 2014). In fact, qualitative research assumes the values and biases of the researcher impact the outcome to some degree (Merriam & Tisdell, 2015). It is important to contemplate and discuss the researcher's relevant values and biases.

For decades I have been a fan of McClelland (1965a) and the acquired needs theory including follow on work by Litwit and Stringer (1968), and others. I have witnessed firsthand the value and benefit the acquired needs theory brings to organizations large and small when leadership in particular implements operational elements of the theory such as cultivating an effective organizational climate and fostering leadership styles appropriate to the wants and needs of the organization. As a leader I have personally utilized and significantly benefited from the theory during 20 years at Hewlett Packard serving in middle management and in my entrepreneurial endeavors leading small businesses since retiring from HP. The skillful elevation and suppression of key organizational climate variables leading to appropriate *achievement arousal* has yielded amazing results in my professional and personal life. My own family has benefited greatly including my extended family and immediate family. The art of recognizing destructive *power arousal* and skillfully using the need for *affiliation* to diffuse it is a powerful tool for leaders in any organization of any size. Given this bias, in this study I was careful to not over-sell or over-emphasize the benefits of the theory or its operational implementations. I remained aware of my bias in this area and remained balanced. On one hand, the bias and passion served this qualitative research well. On the other hand, like any strength, it could have negatively impacted the study if the passion was taken too far.

Another bias/trait I must be careful of is that I naturally have a fix-it mentality especially when asked to do so. This study involved observing, analyzing, and reporting. I was cautious

during the interaction with the participants to not fall in to consultant mode even when asked by the participants. The TAT results yielded interesting and beneficial information for the participants. Business organizations pay hundreds of dollars per person for their employees and leadership to have this same customized, personalized insight from the TAT. I fully expected participants to be excited and inquisitive about the TAT results and some of the deeper meanings behind them, and they were. I explained the results and what they meant while simultaneously refraining from providing consultation or advice even when asked.

Lastly, my previously mentioned bias toward post-positivism and my natural preference of quantitative inquiry over qualitative inquiry was kept in check. This study has caused me to have a deeper appreciation for qualitative research. I used to question the value of qualitative research even to the point of holding it somewhat in disdain. After all, only true research (meaning only quantitative research with empirically demonstrated reliability and validity) was to be considered worthy—so I once thought. Now my approach is much more balanced. I have this study and my advisor to thank for this newfound balance. As a former scientist, engineer, and business manager steeped in the tradition of quantitative inquiry, I had to be careful during the implementation of this study to continuously recognize this is valuable qualitative case study research—grounded in the interpretivism tradition and open to subjective interpretations from the perspectives of very important people to our society—our teachers.

Delimitations and Limitations

Delimitations and limitations of case study research should be openly acknowledged and discussed (Yin, 2014). Delimitations of this study included the choice to target elementary schools in the selection of participants. This delimitation has pros and cons. On one hand, targeting elementary schools exclusively provided deeper understanding because the story from

participants and participants' motivation can be compared and contrasted from within limited grade levels having similar experiences and concerns. The delimitation of choosing participants from elementary grade levels in one area within one state in one country may limit broader applicability.

Another delimitation was the choice to use Microsoft Teams for interviews. As powerful as Microsoft Teams and similar online tools are, subtle cues and non-verbal communication may have been missed, which may have altered the researcher's ability to sense and inquire about areas possibly important to the participant. Given CDC guidance and the current state of the pandemic, this delimitation was a prudent decision.

One limitation of the study was that interaction between the MT and TC pairs could not be easily controlled, and was likely to occur as MTs and TCs shared experiences with one another in an effort to enhance the success. This limitation may have ironically enhance the results of this study, particularly for Research Question #2 if such discussions result in similarity of success factors perceived by the MT/TC pairs. Deeper understanding of individual and team perceptions may have been curtailed if interaction results in participants feeling as though they must comply with the norms within the organization regarding success factors or the impact of the global pandemic on motivation and their co-teaching experiences.

Another limitation involved the un-monitored administration of the TAT. Even though instructions included the importance of responding to the TAT alone without distraction or interaction with others, there were no specific controls to prevent collaboration or interaction while completing the TAT. This limitation was mitigated by social distancing habits during the pandemic. The probability of participants using their face-to-face time during a pandemic to complete the TAT was low. Additionally, the TAT is often unmonitored in implementation;

doing so in this study is not unusual.

Lastly, narrowing the scope itself constitutes a delimitation (Creswell & Creswell, 2018). Some of this narrowing has already been discussed in this section with regard to location and demographics limitations. Additionally, the purposeful choice to intentionally narrow the scope of the study to the co-teaching experience and the acquired needs theory of human motivation as the theoretical framework may limit broader applicability of the findings.

Summary

Chapter 3 links the purposes of this study and the research questions to the philosophical foundations and the research design intentionally selected for fulfilling the purposes and answering the research questions. The interpretivism approach was described with the rationale for selecting a qualitative study. Additionally, the rationale for selecting *case study* as the method and the *exploratory case study* as the specific type of case study selected was reviewed. The data collection methodology, analysis methodology and specific research steps were articulated followed by a discussion of the trustworthiness of the study, researcher positionality, and delimitations and limitations of the study.

When writing about the nature of qualitative research and case study research specifically, Stake (1995) quipped, “The function of research is not necessarily to map and conquer the world but to sophisticate the beholding of it” (p. 43). This dissertation and its research aim to illuminate and understand why co-teaching relationships persist to success and how the global pandemic has impacted co-teaching and motivation as well as how motivation has impacted the co-teaching experience.

CHAPTER 4: RESEARCH FINDINGS

The purpose of this research study was to understand what factors contributed to the success of highly rated co-teaching experiences for the participants and to what extent those success factors are related to the measured underlying human motives of the participants as defined by and measured within the context of the acquired needs theory of motivation. The purpose included understanding these success factors within the context and impact of the global Covid-19 pandemic. The following research questions guided the study.

1. What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (the “success factors”)?
2. Are there any common success factors between the MT/TC teams studied?
3. Are any of the success factors related to the three motivation constructs being studied—being the affiliation motive, achievement motive, and power motive (as defined) of the TC or MT?
4. What do the TC and MT believe about how their own measured motives contributed to the success of the co-teaching experience?
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

During in-depth interviews, study participants described their perceptions and experiences with their co-teaching work during the spring, 2021 semester. They discussed and described how their own motivation pattern and the global pandemic impacted their co-teaching experiences.

This chapter reports the research findings based on analysis of the following data sources: motive patterns, emerging from the participants’ thematic apperception tests, semi-structured

interviews, and the researcher's observations of the same. It begins with the background summarizing how the participants are labeled within the chapter, how the participants were selected, and how the data were collected and organized. The findings for each case studied are presented followed by a summary providing the answers to the research questions.

Background

The participants of this study included four co-teaching teams labeled Team 1, Team 2, Team 3, and Team 4 in this chapter comprised of four teacher candidates from Colorado State University referred to as TC1, TC2, TC3, and TC4 and three mentor teachers referred to as MT1, MT2, and MT3 as shown in Table 3 below.

Table 3

Team names with grade level and participant names with teacher candidate's anticipated degree

Team 1 (K)	Team 2 (3 rd Grade)	Team 3 (K)	Team 4 (K)
MT1	MT2	MT3	TC4 (Master)
TC1 (Bachelor)	TC2 (Bachelor)	TC3 (Master)	

The mentor teacher from co-teaching Team 4 did not opt in to the study despite three invitation attempts by email spread across three weeks (May 14, 2021, May 20, 2021 and the third attempt on May 27, 2021). In the second and third attempts I included that their teacher candidate had opted into the study. After the third attempt, I decided further attempts by email or attempting other methods of contact might result in undue influence (Creswell & Creswell, 2018).

The plan for the study was to seek co-teaching teams from Beattie Elementary School ("Beattie") as participants with the alternative plan to expand to other schools if the Beattie co-teachers did not opt in. Perhaps because those anticipated co-teaching teams were fatigued from

current involvement in the 2021 Beattie Evaluation Project, none of the Beattie co-teaching teams opted into this study. The alternative plan was implemented (Curtis et al., 2000). The co-teaching teams opting in were from four different schools in northern Colorado.

Thematic Apperception Test (TAT) assessments were performed first followed by the interviews. The firm Spencer Shenk Capers & Associates (SSCA) in Long Beach, CA was hired to administer and score the TAT assessments. SSCA has more than 40 years of experience scoring thematic apperception tests for the acquired needs theory of motivation. TAT assessments were completed online by the participants at their convenience. Results were emailed to me, and I emailed the results to each participant with a request to schedule the interview. Interviews were conducted online and recorded using Microsoft Teams. In addition to obtaining approval to record the interview as part of the consent, approval to record and transcribe the recording was obtained live as part of the interview session. The semi-structured interview approach was employed during the interviews, and the interview guide in Appendix A was followed. All interviews occurred in the months of June and July, 2021. Happy Scribe Ltd was hired to transcribe the interviews. Transcription accuracy was verified by listening to each interview again while reading the transcription and making corrections as needed (MacLean et al., 2004). Transcriptions were coded with the aforementioned labels (TC1, MT1, TC2, etc.) instead of speaker names. The data were saved locally on a secure PC. The data were imported in to NVivo and then coded and analyzed to identify emerging themes, trends, and commonality within and among the responses of the participants (Lincoln & Guba, 1985); thus, five cases were analyzed: Team 1, Team 2, Team 3, TC4, and a collective analysis of the interview transcriptions of all participants.

Team 1 Findings

Both TC1 and MT1 identified as female. TC1 was in the final semester of completing her bachelor's degree. MT1 had been teaching for 13 years. Team 1 did not do any remote teaching during the semester as a result of the pandemic. Team 1 interviews were conducted after their TAT results were received. TC1 completed the TAT on June 14, 2021, and MT1 completed the TAT on May 27, 2021. TC1 was interviewed at 10:00 am on June 29, 2021 using Microsoft Teams. MT1 was interviewed at 8:00 am on June 30, 2021 using Microsoft Teams.

Thematic Apperception Test

The acquired needs theory posits all individuals have recurrent concerns toward a goal state or condition in the areas of achievement, affiliation, and power which drive, direct, and select much of the human behavior we observe in academic and business environments. Most individuals score higher on a *dominant need* with varying scores on the others. This results in a *motive pattern* presenting itself when graphing the relative strengths of the three primary motives of the acquired needs theory. Team 1's *motive patterns* are illustrated side by side in Figure 5 below. These graphs illustrate the relative needs for achievement, affiliation, and power for each team member as measured by the TAT.

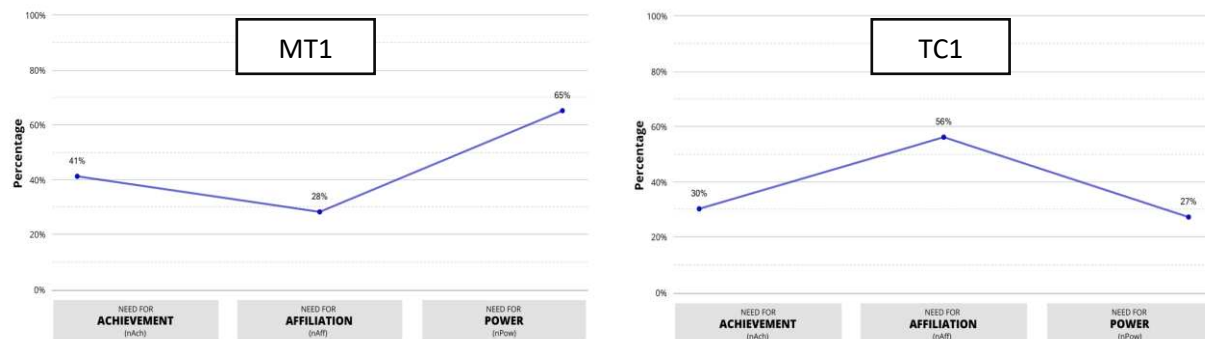


Figure 5

Side by Side Comparison of TAT Results for Team 1

Note the complementary nature of the two patterns. This complementary motive pattern between the mentor teacher and the teacher candidate was observed in all the teams studied in this dissertation. To participate in this study, the teams had to persist to at least 75% of the semester and rate the experience as “good” or better. Given all the individual participants self-identified the team experience as successful and self-selected to be in this study, a large *n* quantitative correlation study is recommended for future research to help determine if complementary motive patterns as measured by the TAT predict persistence in co-teaching and predict the perceived success of the co-teaching experience by both team members. More on these recommendations for future research can be found in Chapter 5.

The literature identifies motive patterns found to be common in various groups of individuals such as successful business leaders where certain motive patterns emerge as being more common. For example, successful CEOs on average are found to have moderately high achievement needs, low affiliation needs, and very high-power needs (Jacobs & McClelland, 1994) similar to MT1 above. However, there is a gap in the literature specifically examining complementary motive patterns in two person organizations such as co-teaching teams.

The research questions for this study do not include inquiry and analysis as to the presence or significance of complementary TAT motive patterns in successful two person organizations. It is tempting given all three teams examined in this study resulted in complementary motive patterns. However, inquiry and analysis of these complementary patterns is beyond the scope of the research questions posed in this dissertation and is left to future recommended research.

MT1’s most dominant motive was power according to the TAT meaning MT1 scored the highest on influence related themes and imagery in the stories she wrote in response to the

pictures presented. MT1's least dominant motive was affiliation and MT1's achievement imagery scores were moderately high. MT1's motive pattern is nearly identical to the *leadership motive pattern* discussed in the literature review (McClelland, 1985b; McClelland & Boyatzis, 1982). Longitudinal gender studies of the *leadership motive pattern* suggest females who are successful in business attaining high levels of management are more likely to use *resourceful power* rather than *reactive power* (Jacobs & McClelland, 1994). *Resourceful power* is scored when a person in power or authority acts on behalf of another person by protecting, supporting, inspiring, teaching, leading, or otherwise promoting the welfare of another person in a positive manner. *Reactive power* is scored when a person engages in aggressive or assertive action against someone who is usually an authority figure or someone else perceived to have power. *Reactive power* differs from *resourceful power* in that people with reactive power or authority in the respondent's TAT imagery are often viewed negatively as hostile, evil or incompetent rather than benevolent or helpful. MT1 used resourceful power imagery in the TAT responses and MT1's interview suggests resourceful power motivation based on the themes related to supporting, inspiring and even protecting TC1. MT1 had zero failure anticipation themes in her power related TAT responses and zero negative feeling themes providing further evidence MT1's dominant motive tends toward resourceful, socialized power.

TC1's most dominant motive was affiliation suggesting TC1 scored the highest on imagery related to relationships in her TAT responses. Achievement and power were the less dominant motives with nearly identical scoring. TC1 had zero failure anticipation themes, zero negative feeling themes, and zero world block themes meaning her TAT imagery did not include stories where good relationships were not possible due to something outside of the respondent's control. TC1's TAT responses emphasized relationships as positive and meaningful. TC1's

interview was consistent with these themes. TC1 intentionally and purposefully cultivated good relationships to the degree she could within the constraints of pandemic related restrictions.

Interviews

Near the beginning of the interview MT1 stated this was the first time she had engaged in co-teaching. After reviewing the TAT findings and explaining what they meant, neither TC1 nor MT1 were surprised by the results. Both felt the TAT accurately represented the relative differences between their needs for achievement, affiliation, and power. Both felt enlightened by the TAT results, and both were eager to discuss how their motives may have impacted the co-teaching experience. Several important themes emerged from the Team 1 interviews which serve to answer the research questions in this study. The interview data for Team 1 are summarized within the table in Appendix B including individual responses to each interview question from MT1 and TC1.

Success Enablers and Inhibitors

Both TC1 and MT1 believed their good relationship was integral to the successful experience they had co-teaching. Both thought they worked well together and communicated well. For example, MT1 said “TC1 was excellent at having relationships” and “co-planning was a key to the success of the experience.” When asked about the things which made the experience successful, TC1 said:

I would say the strong relationship with MT1 was the biggest thing. We get along really well, and I think we are both open to try new things and working together and both being reflective on our practice and as well as coachable. And we are like, oh, this doesn't really

work out this way. Maybe we could try this. I think this greatly impacted our co teaching relationship in a positive way.

In addition to the importance of co-planning MT1 specifically emphasized the importance of having the student teaching handbook as significantly contributing to the success. TC1 felt it was helpful that MT1 was good at giving feedback, and MT1 felt it was helpful that TC1 was good at receiving feedback. Strength of relationship and effective communication clearly emerged as success factors for Team 1 as did the willingness to coach by the MT combined with openness to coaching by the TC.

Unclear roles and responsibilities emerged as a theme detracting from the success of the Team 1 co-teaching experience. MT1 did not opine on whether never co-teaching before contributed to this lack of clarity, but did worry throughout the semester about TC1 not being ready for her own classroom without more independent student teaching time. Both TC1 and MT1 independently identified lack of clarity on roles and who does what as detracting from the success. This lack of clarity resulted in some time management issues Team 1 experienced during the semester. As an example, MT1 stated:

I noticed we would tend to go over time. I just had to step back and let her be able to judge the clock herself in a sense and use the clock show her and say: okay, we are late to lunch. Now the first graders coming in don't get to sit down and then the janitor doesn't get to clean. By the end, we really worked on that, and she became successful.

Achievement, Affiliation and Power

In terms of the motives being studied, TC1 stated she made it a point to take time each day to build relationships with the students through preplanned activities with the express purpose of building relationships. She believed teaching is more effective when there is a strong

relationship. MT1 believed her high need for power manifested itself during the semester through influencing TC1 toward excellence and independence supporting the team in the *effective feedback and coaching* success factor mentioned above. TC1 appreciated the feedback and complimented MT1 on her ability to give feedback. TC1 felt she was open to feedback and was willing to receive coaching. MT1 experienced joy and satisfaction in broadening her influence beyond her own classroom and her own school during the co-teaching experience though perceiving her training and coaching was going to positively impact students in the future whom she would never even meet. This *influence beyond the classroom* thinking and the associated satisfaction emerged as a theme as to why MT1 considered her first co-teaching experience successful. Additionally, MT1 recognized TC1 was very easy to coach; MT1 identified TC1's coachability as an important success factor. The combination of MT1's higher need for power combined with TC1's need for achievement and high need for affiliation appeared to have resulted in a more successful and mutually satisfying experience for Team 1. Interestingly, MT1 associated her relatively low need for affiliation may have made a positive contribution because she was able to remain comfortable with the relationship taking a back seat at times when time management or other achievement related needs became a recurring concern. MT1 seemed comfortable prioritizing achievement related needs over affiliation when she felt it became necessary. For example, MT1 said "Relationship had to take a back seat sometimes like when time management became an issue." In contrast, TC1 was not as comfortable when the relationship became less of a priority. For example, TC1 said "my need for affiliation will sometimes outweigh my need for power. I didn't always communicate my ideas or advocate for certain things I was interested in trying." I observed this tension between the complementary or opposite needs between MT1 and TC1 served to improve the experience and aided in

maintaining balance throughout the semester during the difficult times based on the interviews of Team 1.

Pandemic Impact

Team 1 did not do any remote teaching during the semester as a result of the pandemic. Other than the challenge of being forced to remain socially distanced from the kindergarten students, Team 1 did not consider the pandemic to have a large negative effect on the co-teaching experience. Both TC1 and MT1 mentioned some of the success factors were strengthened by the pandemic. TC1 stated the pandemic required them to be more creative and think differently. TC1 believed the pandemic made it so MT1 and TC1 spent more time together and built a better relationship than they otherwise would have because of protocols. TC1 thought this improved MT/TC relationship was perhaps at the expense of not being able to affiliate as much with others or collaborate as much with others outside of the co-teaching team. I observed TC1's repeated emphasis on relationships during the interview may align with her high measured need for affiliation on the TAT. Additionally, Team 1 believed the pandemic led them to focus on finding creative ways to model good social behavior between the two of them for the students to compensate for the lack of opportunity for the natural social development of the children given the social distance protocols. This modeling included intentionally allowing the students to observe how the two of them resolved conflicts and differences when there was contention or when MT1 and TC1 disagreed. But for the pandemic, Team 1 did not believe they would have intentionally modeled positive social behavior for the students' benefit in this manner. A key takeaway from the interviews was the pandemic led Team 1 to focus on finding ways to model good social behavior for the students to compensate for the lack of opportunity for natural social development given the distance protocols.

When asked if there was anything else they wanted to mention not already asked, MT1 wanted to emphasize having the evaluation rubric and having a good relationship and communication with the CSU supervising coach was very important to the success. MT1 added she will continue co-teaching but will migrate into the traditional model toward the end of the semester where the TC takes over the class to make sure the TC can operate independently in their own classroom.

Team 2 Findings

Both TC2 and MT2 identified as female. TC2 was in the final semester of completing her bachelor's degree. MT2 has been teaching for 15 years. Team 2 engaged in remote learning for the first two weeks of the semester as a result of the pandemic. The TAT results for Team 2 were received prior to conducting the interviews. TC2 completed the TAT on May 22, 2021, and MT2 completed the TAT on June 1, 2021. MT2 was interviewed at 3:30 pm on June 29, 2021 using Microsoft Teams. TC2 was interviewed at 4:30 pm on June 20, 2021 using Microsoft Teams.

Thematic Apperception Test

Team 2 *motive patterns* are illustrated side by side in Figure 6 below.

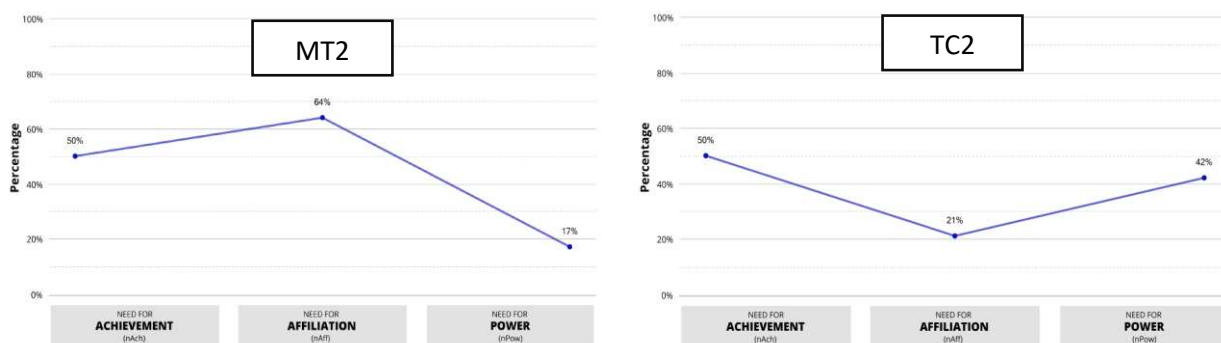


Figure 6

Side by Side Comparison of TAT Results for Team 2

Note once again the complementary nature of the two patterns. This complementary motive pattern between the mentor teacher and the teacher candidate was observed in all the teams self-selecting into this study. It is noted the motive patterns between Team 1 and Team 2 are reversed. In Team 1, the MT had the V shaped motive pattern. In Team 2, it is the TC with the V shaped motive pattern.

MT2's dominant motive was affiliation meaning MT2 scored the highest on imagery related to relationships in her TAT responses. Achievement was slightly lower, and power was the least dominant motive for MT2 suggesting her TAT stories had little to no influence related themes or imagery. There were no negative feelings, failure anticipation or world block themes in MT2's TAT responses meaning the subjects of the stories were not inhibited or blocked by something outside of their own control in terms of their ability to have meaningful relationships and accomplish meaningful things.

Like all the participants, TC2 was asked if she would like to mention anything I did not ask about. In response, TC2 asked if she could "rave about MT2." Note the high degree of affiliation and low degree of power MT2 exhibited during the semester according to TC2. Key words are italicized to highlight strong affiliation and weak power related themes. Here is what TC2 said:

Can I just rave about MT2? I think I would just like to rave about her for a minute. She was just so amazing. I've had so many professors, amazing professors and so many amazing educators growing up. That's why I want to be an educator. But MT2 has been the best teacher that I've ever had in my entire life and *she didn't want to change me. She just wanted me to be the best teacher I could be.* But she just gave me everything she had. And like, *let me decide and let me choose the kind of teacher I wanted to be.* She's just

like, was *very accepting of who I was and the kind of teacher I was and just like my personality*. And she's always just, like, *very encouraging*. And I would always ask her after my lessons, they're like, okay, what could I have done better? And *she'd give me, like small things here and there. But mostly she would just say, I would have done the same thing. I would have taught it the same exact way you did*. And that always made me feel so good because I'm like, okay, if I'm teaching the way MT2 is then I am going to do great. Yeah, she was very encouraging. And I could not have asked to be placed in a better school or classroom or with a better mentor teacher.

TC2's perception of how MT2 leads is consistent with MT2's TAT results. Additionally, if you look closely at the above quote from TC2, her own dominant motive begins to emerge. Phrases like "I would always ask what I could have done better", "I am going to do great", "be the best teacher I could be", etc. may shed some light on TC2's dominate motive.

According to TC2's TAT results, achievement and power emerged as her dominant needs with similar strengths. With a slightly higher score than power, TC2's most dominant need was achievement meaning her TAT imagery mostly involved people accomplishing meaningful things or discussing accomplishing things meaningful to them. TC2's achievement related imagery in the TAT predominantly involved action and activity related themes meaning the characters in the story were engaging in activity to reach their goals related to achievement in a self-reliant, action-oriented way rather than just discussing achievement or desiring achievement but never doing what is necessary to attain achievement related goals. Power emerged from the TAT data as TC2's other dominant motive. Similar to MT1 TC2 used resourceful power imagery in the TAT responses and TC2's interview suggests resourceful power motivation based on the themes related to nurturing, protecting and helping others. There was no world block or loss of

prestige imagery in TC2's TAT responses suggesting self-efficacy and self-reliance on the part of the subjects TC2 wrote about in the TAT stories. Further, TC2 had zero failure anticipation themes in her power related TAT responses and zero negative feeling themes providing further evidence TC2's dominant power motive tends toward *resourceful power* and *socialized power*.

Interviews

Both MT2 and TC2 were extremely satisfied and pleased with their co-teaching experience and rated the experience as more successful than any of the other teams studied. Words like “amazing” and “awesome” and phrases like “it was a dream” and “the best thing I have ever done” were commonplace throughout the interviews.

After reviewing the TAT results and explaining what they meant, MT2 believed it was very representative of how she operates. TC2 was surprised her need for affiliation was below her need for achievement and power. Both were eager to discuss how their motives may have impacted the co-teaching experience. There were important emergent themes from the Team 2 interviews. These themes serve to answer the research questions in this study. The interview data for Team 2 are summarized within the table in Appendix C including individual responses to each interview question from MT2 and TC2.

Success Enablers and Inhibitors

Both TC2 and MT2 believed their “good” relationship was critical to the successful experience they had co-teaching. Both thought they worked well together and communicated well. Additionally, MT2 specifically emphasized the importance of having flexibility and freedom and not being micromanaged by either CSU or the elementary school administration. TC2 stated the university coach was very important as was the comradery and support she received from her cohort at CSU as well as the administration of the school where she co-taught.

Strength of the co-teaching relationship emerged as a success factor for Team 2 as did the support and flexibility offered people at both CSU and the elementary school.

Emergent themes detracting from the success of the co-teaching experience for Team 2 included restrictions around the pandemic and the TC's practicum experience. MT2 made it clear at the beginning of the semester she was uncertain whether or not TC2's practicum experience adequately prepared her. MT2 attributed this to the pandemic possibly preventing TC2 from having a rich practicum experience at CSU before arriving to MT2's classroom. MT2 stated TC2 was so strong she quickly overcame the lack of practicum preparation. TC2 believed the mask and social distancing restrictions detracted from the success of the co-teaching experience. However, neither MT2 nor TC2 believed any of these things were significant enough to impact their overall assessment of the experience.

Achievement, Affiliation, and Power

With regard to the motives being studied, MT2 believed her high need for affiliation motivated her to cultivate a great relationship with TC2 and also modeled the strength of the relationship to the students. This modeling served as a positive example for the kids during social distancing requirements. MT2 stated her relatively high need for achievement led her to maintain high expectations and a high level of encouragement for the students and TC2 contributing to the success as well. TC2 said she wanted to do well and be the best version of herself for the kids. TC2 associated these wants and desires with her high score on the need for achievement.

Pandemic Impact

Team 2 engaged in remote learning for the first two weeks of the semester. The remainder of the semester involved socially distanced in person learning. Both MT2 mentioned their class was largely Hispanic, and they were both fearful of getting covid-19 and giving it to

kids with families who may be more vulnerable based on the information they were receiving from the media and the Center for Disease Control (CDC). The benefits of co-teaching during a pandemic emerged as a theme driven primarily one or the other of the co-teaching team being able to work with kids when they returned from long quarantine periods. One of them kept the rest of the students progressing while the other worked one on one with quarantined students when they returned to bring them to where the rest of the students were. Team 2 believed they would not have been as successful in teaching during the pandemic without co-teaching. Students would have fallen behind. MT2 sensed her need for affiliation increased because the need had not been met during the pandemic. MT2 wanted relationships and believes the pandemic likely resulted in an even closer and more effective relationship with TC2 than they may have had in the absence of the pandemic. Team 2 believed the strength of their relationship served as a positive example for the kids and was important for their social development of the children given the age and social development needs of eight and nine-year-old children.

Team 3 Findings

Both TC3 and MT3 identified as female. TC3 was in the final semester of completing her master's degree. MT3 has been teaching for 15 years, and TC3 was MT3's 12th student teacher. Team 3 did not do any remote teaching during the semester as a result of the pandemic. The TAT results for Team 3 were received prior to conducting the interviews. TC3 completed the TAT on May 21, 2021, and MT3 completed the TAT on June 7, 2021. MT3 was interviewed at 9:00 am on June 29, 2021 using Microsoft Teams. TC3 was interviewed at 9:00 am on July 5, 2021 using Microsoft Teams.

Thematic Apperception Test

Team 3 motive patterns are illustrated side by side in Figure 7. These graphs illustrate the relative scores for each team member involving imagery and themes related to the need for achievement, affiliation, and power.

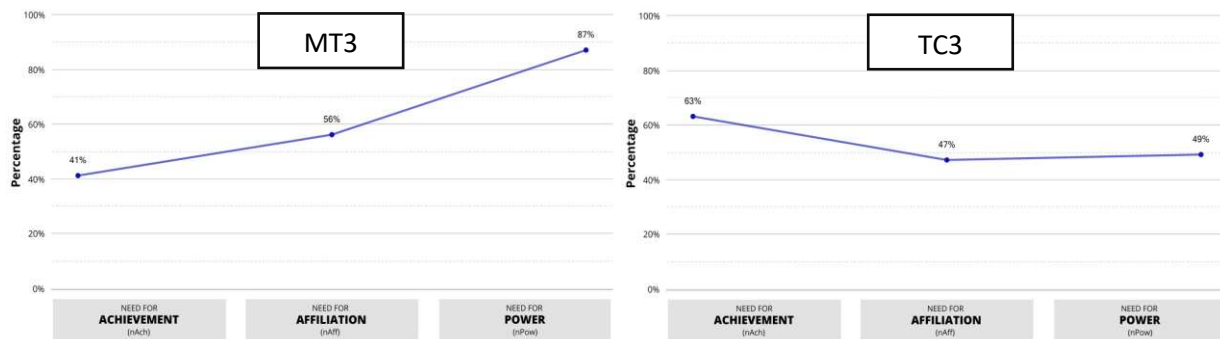


Figure 7

Side by Side Comparison of TAT Results for Team 3

Once again, note the complementary nature of the motive patterns for Team 3. Complementary motive patterns between the MT and TC were observed in all the teams self-selecting into this study. However, in Team 3, the patterns are more linear yet still complementary. MT3's motive pattern curves up to the right where TC3's motive pattern curves down to the right.

MT3's dominant motive was power, and the score was much higher than the scores for achievement and affiliation imagery. MT3's TAT responses scored heavily on activity related to power meaning the subjects in MT3's stories written from the pictures were demonstrating self-reliance and tangible actions toward influencing others. Additionally, MT3's interview comments and responses were loaded with power themes. Her interview responses were consistent with the TAT findings. For example, MT3 spent a lot of time and energy during the interview talking about the importance of *influencing beyond her classroom* including the clearly stated goal of developing as many teachers for other classrooms as possible. MT3 has had no less

than 12 student teachers in her 15-year career. MT3 said she opts in to coach a student teacher every year. These statements and behaviors by MT3 combined with their frequency and intensity indicate a strong need for power (McClelland, 1965). One of many examples of the multitude of MT3's power related statements is the following from MT3's interview (italics highlight the key words):

My biggest goal in having student teachers is, you know, *to put good quality people* in front of children – *not that my way is the only way to teach. But of course, I do what I think is best for children.* And then the more people I think that are in front of children *with my beliefs* or whatever, you know, *I think extends my reach in education.*

MT3's need for influence/power was palpable during the interview. Even having the TAT results in advance and knowing MT3's very high score for the power motive, I was somewhat surprised and was not fully expecting the frequency and intensity of the power related themes as she spoke. Listening to MT3 was inspiring because of the passion in how she spoke about extending her reach beyond her classroom and because it was *resourceful power* which so highly motivated MT3.

MT3's TAT stories and her interview suggest her strong need for power is rooted in the need for *resourceful power* suggesting a person in power or authority acts on behalf of another person by protecting, supporting, inspiring, teaching, leading, or otherwise promoting the welfare of another person in a positive manner. The literature contrasts *resourceful power* with *reactive power* indicating a person engages in aggressive or assertive action against someone who is usually an authority figure or someone else perceived to have power (Jacobs & McClelland, 1994). *Reactive power* differs from *resourceful power*. *Reactive power* imagery involves people with power or authority who are often viewed negatively as hostile, evil or incompetent rather

than benevolent or helpful. In contrast, *helpless power* is when a person feels the need to exert power or fix a situation but feels they lack the resources, ability, or will to act (Jacobs & McClelland, 1994). In her TAT imagery and stories, MT3 had zero negative feeling scores, zero failure anticipation scores, zero world block scores (meaning the characters in the TAT stories tended to not be helpless), zero failure anticipation scores, and zero loss of prestige scores. This eliminated half of the scoring categories for power in the TAT, and MT3 still had an extremely high score for power. All of MT3's power imagery scores were within the positive feeling, success anticipating, nurturing, encouraging, action oriented, and self-reliant categories. This suggests MT3's need for power is highly resourceful and steeped in socialized power defined as a recurrent concern toward the goal state of influencing others or exerting power over others for the greater good or the general welfare as opposed to personal gain or self-aggrandizement (Magee & Langner, 2008).

TC3's dominant motive was achievement meaning her recurrent concerns involved imagery and themes related to people accomplishing meaningful things in their life. For TC3 there was not a clear least dominant motive as affiliation and power scored similarly with affiliation being slightly lower than power. TC3's affiliation imagery in her TAT responses scored highly on activity related themes with zero failure anticipation, zero negative feelings, and zero world blocks suggesting a sense of self-reliance and success anticipation. This may be related to TC3's thirty years of business experience prior to pursuing a new career in teaching.

Interviews

After reviewing the TAT results and explaining what they meant, TC3 was not surprised by the results and thought it accurately reflected the relative strengths of her motives. MT3 expected achievement to be higher given she was a college athlete years ago. Several important

themes emerged from the Team 3 interviews. These themes serve to answer the research questions in this study. The interview data for Team 3 are summarized within the table in Appendix D including individual responses to each interview question from MT3 and TC3.

Success Enablers and Inhibitors

Both TC3 and MT3 believed the high degree of quality communication between them was extremely important to the successful experience they had co-teaching. Both thought they worked well together and communicated openly and effectively. TC3 felt respected and said the communication with MT3 made her feel like an equal. This inspired her. MT3 emphasized the great communication within the team enabled TC3 to have a sense instinctively when to jump in and when to not jump in. Team 3 had daily communication sessions about what went well and what to do the next day. Preparation seamlessly followed communication for Team 3. With Team 3, you get the sense the preparation and efficacy of the teaching on the next day organically and quite naturally blossomed from the communication sessions with little effort. Team 3 attributes their great relationship to the great communication they had with one another.

Team 3 struggled to find detractors from the success of the experience. MT3 mentioned in her previous co-teaching relationships, the TC is often too focused on what is next and is not present enough in the classroom or want to do their CSU school work in the classroom. MT3 wanted me to know these things have detracted from the success in the past but emphasized this was not the case with TC3.

Achievement, Affiliation, and Power

Regarding motives, MT3 spent a lot of time and energy talking about how important it was for her *influence to go beyond her own classroom*. This aligns with her very high score for power imagery on the TAT. Her need to *influence beyond her classroom* is why MT3 engages

regularly in co-teaching with student teachers. MT3 wants to expand her influence and replicate her best practices to as many classrooms as possible through co-teaching. As MT3 kept speaking about her co-teaching experience, she came to the conclusion that until this study she had been unaware of just how important power and influence were to her. Frequent long pauses while MT3 was speaking seemed to be punctuated by reflective awareness of a previously unknown or latent truth regarding the recurrent concerns tending to direct her behavior.

TC3 emphasized the great communication helped her achieve her learning goals for the co-teaching experience. TC3 also talked about how important good relationships were emphasizing the great relationship she had with her MT made it easier for her to have great relationships and affiliation with the children. TC3 believes good relationships are contagious in that good relationships beget more good relationships. TC3 also felt the good relationships with MT3 and others in the school gave her a sense of belonging expanding her ability to influence through teaching. TC3 said she believed any kind of teaching should be done in such a way that you make sure the perception of the child was that here's a person who cares about them and wants them to learn. TC3 said it was easier for her to teach this way and have those kinds of relationships with the kids when she has good relationships with her co-teacher and the other teachers.

Pandemic Impact

Team 3 did not do any remote teaching during the semester as a result of the pandemic. Adaptability was key for Team 3. They added more play time as needed to compensate for lack of social interaction. MT3 and TC3 agreed to prioritize social development over academic development given the age of the kids and the deficit in social learning observed for their class. The communication enabled Team 3 to more easily adapt and adjust to meet the needs of the

students. MT3 emphasized the pandemic made parents more aware of the importance of social development. MT3 believes the affiliation and social development of the kids at this age is core to executive functioning and academic development. TC3 emphasized the pandemic reinforced the importance of affiliation and how difficult it is to learn life skills without the ability for the kids to mingle and play. In summary, the pandemic challenged Team 3 in regard to the children being socially distant from one another restricting play and social development for the kids. Team 3 worked together to overcome the challenge through effective communication resulting in the implementation of changes centered around compensating for the lack of opportunity for the kids to interact closely with one another.

TC4 Findings

As previously mentioned, MT4 did not opt in to the study. Emergent themes from the data involving TC4 will be presented. TC4 identified as female and was in the final semester of completing her master's degree. Without being asked, TC4 mentioned she was 50 years old and was pursuing a teaching career after raising her children as a stay at home mom and then working in business for a number of years. Team 4 engaged in remote learning for the first two weeks of the semester. The TAT results for TC4 were received prior to conducting the interview. TC4 completed the TAT on May 27, 2021. TC4 was interviewed at 9:00 am on June 28, 2021 using Microsoft Teams.

Thematic Apperception Test

TC4's motive pattern is illustrated Figure 8 below.

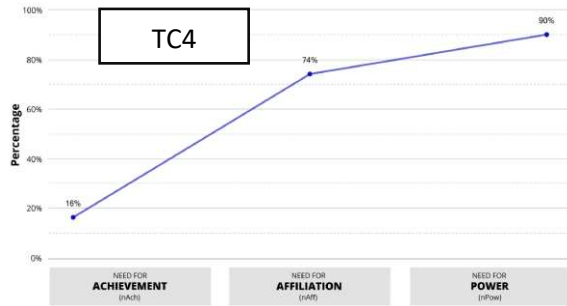


Figure 8

TAT Results for TC4

Note TC4's motive pattern was more linear similar to Team 3, but is more similar to MT3 than TC3. TC4's motive pattern goes up to the right just like MT3's where TC3's motive pattern trends down to the right. It would have been interesting to have been able to obtain MT4's TAT results to see if MT4 and TC4 had complementary motive patterns.

TC4's need for power is strong according to the TAT. TC4 had zero negative feeling scores, zero failure anticipation scores, zero failure anticipation scores, and zero loss of prestige scores. Nearly all of TC4's power imagery scores were evenly split between *activity* related themes and *world block* related themes meaning the subjects in the stories were encountering something outside their control stopping or blocking them from successfully influencing others or stopping or blocking them from having the opportunity to influence others. These findings suggest the subjects in the story were trying hard but were being blocked by things out of their control and were involved in *helpless power* which is when a person feels the need to exert power or takes action toward power but feels they lack the resources, ability, or will to act (Jacobs & McClelland, 1994). TC4's world block scores were four times higher than any of the other participants. Interestingly, TC4 expressed repeated concern during the interview that she had not yet found a position teaching. She felt MT4 had disengaged from helping her find a position even though TC4 perceived they had a very good relationship. Thus, TC4 herself was

experiencing perceived *world blocks* in terms of her own ability to influence through teaching at the time of the TAT and interviews. Disengagement may be a contributing reason why MT4 chose not to engage in this study.

Interview

After reviewing the TAT results and explaining what they meant, TC4 said she thought her score for affiliation would be higher than her score for power. Interestingly, as we progressed through the interview, TC4 explored her own motives in various situations and acknowledged on several occasions it was influence/power driving much of her behavior. On her own she came to the conclusion it wasn't so much of a surprise that her need for power scored higher than her need for affiliation. The interview data for TC4 are summarized within the table in Appendix E including individual responses to each interview question from TC4.

Success Enablers and Inhibitors

TC4 used the word “languishing” eight times throughout the interview. Those eight times were spread out evenly throughout the entire time including from the beginning. Nearly all of the references to “languishing” referred to MT4 and the impact the pandemic had on MT4.

According to TC4, MT4 admitted she was “languishing”. TC4 had a personal relationship with MT4 before co-teaching with her and requested MT4 as her mentor teacher for her student teaching experience. TC4 gave the co-teaching experience two ratings on a scale of one to ten. TC4 rated the experience an eight in light of the pandemic and also said if the same thing happened without the pandemic she would have rated it a four or five out of ten. TC4 felt as though her relationship with MT4 was very important because without it, the experience would

have been much worse. Strength of relationships was a recurring theme for TC4 as an enabler of success.

TC4 believed a lack of freedom and a lack of flexibility were inhibitors to success. She attributed much of this to the pandemic and to the “languishing” of MT4. TC4 wanted to do more and advocate for improvements or potentially better ideas but felt as though it would have strained the personal relationship with MT4. For example, TC4 said:

Personally, MT4 and I were really close. And maybe that's another reason the academic side, that I just let some things go because I don't know if I just didn't want to push her more. I wanted to keep - we had a great relationship and I didn't want to rock the boat. And so I just followed her lead.

Other times TC4 mentioned she should have “pushed more”. There seemed to be regret in her tone and demeanor. At least for Team 4, it appears the strength and closeness of relationship swings both ways in that it can be a great enabler for a successful co-teaching experience and simultaneously be an inhibitor particularly when the relationship was pre-existing and personal outside of work. In Team 4’s case, the close relationship led TC4 to ignore or at least delay her need for power while MT4 was present. Given MT4 missed a lot of work according to TC4, TC4 was able to experience the influence and power she needed when MT4 was absent which TC4 said she “loved”. “Loving” control of her classroom was mentioned several times in TC4’s interview.

Achievement, Affiliation, and Power

TC4 felt her relatively high need for affiliation facilitated a successful co-teaching experience. Time and energy spent discussing how she cultivated and maintained relationships

were recurring themes during TC4's interview. The following was typical of how TC4 discussed relationship:

I think if MT4 and I hadn't had the relationship, we did, I could have driven her a little crazy when she was languishing. And I was like, let's do this. So I toned myself down a little, and I think she brought herself up a little bit to meet me. So I think affiliation was really important for our influence with the children.

TC4 did not elaborate on the word "languishing" other than to say it is how MT4 described herself and it involved some disengagement, sadness, and substantial absence from the classroom.

TC4 emphasized achievement as important particularly in regard to demonstrating her teaching skills to the school administration. As an example, TC4 said:

I am looking forward to getting hired, and sometimes the vice principal or the principal would come in the classroom. And some of the times I wished I was teaching. I wished it was the day when I was the one in front of the students because I would love to get hired at that school. And they knew me as a sub.

In regard to power, as the interview progressed TC4 became more and more comfortable recognizing and embracing her need for power and influence. She recognized her need for power was embedded within several of the experiences and circumstances during her co-teaching experience. For example, TC4 said:

When I look at how I really like to teach by myself, I was so excited when MT4 would text me in the morning and say: "hey, I'm not feeling great. Can you handle the class today?" I would be so thrilled. I'm like, if you need another day, take it. So I really did

want that; I wanted that influence. Yet I didn't push enough, probably to do it on my own when she was in the classroom.

Pandemic

TC4 believed the pandemic had an impact on her co-teaching experience. She felt the pandemic resulted in a lack of opportunities for relationships she considered very important. Physical touch was also greatly curtailed, and TC4 considers physical touch as important to the development of children. TC4 believed the masking inhibited the children's development of their phonemic awareness.

Team 4 engaged in remote learning for the first two weeks of the semester. According to TC4, remote learning was greatly enhanced by having two co-teachers

because one would teach while the other still manage behaviors and managed someone's hands up, you know, looking at all the students seeing if they're engaged, giving kudos to those who are engaged, and in seeing the other ones to remain engaged, I think it really helps to have a co teacher in this instance.

Collective Interviews

Several common themes emerge when taking into account the whole of the interviews together.

Success Enablers and Inhibitors

The quality of the relationship between teacher candidate and mentor teacher emerged as the single most emphasized and important success factor. The importance of and depth of the co-teaching relationship was woven within and between all the teams participating in this study. There was a theme of symbiosis between MT and TC emerging among the co-teaching teams studied serving to benefit both team members and most importantly the students being taught by

the co-teaching teams. A type of synergy emerged which seemed to be enabled by not just the relationship, but also the communication between MT and TC. The individuals spoke independently in a way which when taken together along with body language and tone suggests their good relationships facilitated good communication and the good communication facilitated good relationships as a positive feedback mechanism. For these co-teaching teams, the great enabler to success appears to be relationship and communication together in such a way where one improves the quality of the other recursively. Interestingly, the pandemic may have contributed to success among the teams because of the restrictions resulting in a very close relationship between MT and TC often to the exclusion of other work relationships due to social distancing and restrictions involving gatherings.

Achievement, Affiliation, and Power

Power arousal was noticeably absent in the co-teaching teams participating in this study. *Power arousal* is the state or condition where two or more individuals (or teams) diminish their capacity to cope with one another or to perform as a team due to behavior driven, directed, or selected by one individual's need for power which then causes or tempts the other to respond in kind with their own power oriented behavior (McClelland, 1965). Typical manifestations of power arousal include situations where each individual (or team) attempts to "amp up" or "one-up" the other in a cascading fashion. Power arousal can and often does occur in all relationships and organizations of all sizes including two-person organizations such as small partnerships and teams. Power arousal can be quite destructive particularly when it is *personalized power* being aroused (Litwin & Stringer, 1968). In a power aroused team, the performance of the team and team member satisfaction are often greatly diminished sometimes for long periods of time – sometimes indefinitely. Because increased or enhanced affiliation serves to diffuse power arousal

(Litwin & Stringer, 1968), it is likely the lack of evidence of power arousal among the teams studied here may be due to the aforementioned common success factor of good relationships combined with good communication in symbiosis with one another.

Another theme emerging from the data related to motives was the prevalence of *resourceful power* needs when there was a team member scoring high on the need for power. In all cases where power was the dominant motive among one of the team members, there were abundant *resourceful power* themes and no *reactive power* themes meaning power was utilized to protect, support, inspire, teach, lead or otherwise promote the welfare of another person in a positive manner. Incidentally, Litwin and Stringer (1968) found *power arousal* to be less prevalent when *socialized power* or *resourceful power* is present as opposed to *personalized power* or *reactive power*. The *resourceful power* needs and manifestation of those needs among the teams did not appear to diminish the relationships or communication between co-teaching team members based on analysis of the interview data. As previously mentioned, in all cases for the teams self-describing as successful and opting in to this study, the TAT results were complementary meaning if one team member had power as a dominant motive, the other tended to have power as the least dominant motive. It would be interesting to study a large sample of co-teaching teams and observe what happens when power is the dominant need of both team members. Would power arousal be more prevalent without complementary motive patterns?

Finally, an emergent theme common to the teams involved the MT's power related need to *influence beyond their classroom*. The MTs with high TAT scores for power spoke of how important it was to them that their own best practices and their know-how find its way into other classrooms to deliver the best possible teaching to students.

Pandemic Impact

From the perspective of the teams participating, the pandemic had little to no negative impact on the perceived success of the co-teaching experience. All teams noted the impact to the social development of the children and TC4 noted the negative effect of the pandemic on her opportunity for having relationships outside the co-teaching team. However, in terms of the co-teaching experience itself, the pandemic did not substantially inhibit the success of co-teaching. To the contrary, an emergent theme among the teams studied was the pandemic actually may have facilitated close relationship and communication between team members.

Flexibility during the pandemic emerged to be important factor to the success. A common theme among the teams was the creativity involved in intentionally modeling good social behavior as a co-teaching team for the kids out of concern they may not have the social development opportunities because of the pandemic. The tone and body language during the interviews suggested there was a lot of excitement and energy from both the TCs and the MTs surrounding their ability to implement modeling to demonstrate good relationships and social awareness and positive social interaction even in disagreements and contentious situations. This would not have been possible without co-teaching.

Summary

The data collected and the analysis of the data served to answer the research questions posed in this study.

1. What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (the “Success Factors”)? The top five reasons this specific co-teaching experience was successful according to the TCs and MTs studied are:
 - a. Good relationship with their co-teaching partner.

- b. Good communication with their co-teaching partner.
 - c. Autonomy and freedom granted by elementary school administrators and CSU faculty.
 - d. Working out roles and responsibilities as early in the semester as possible.
 - e. Mentor teachers and CSU coaches giving support and frequent and quality feedback to teacher candidates.
2. Are there any common Success Factors between the MT/TC teams studied? The common success factors between the MT/TC teams studied are:
- a. Good relationship with their co-teaching partner.
 - b. Good communication with their co-teaching partner.
 - c. Autonomy and freedom granted by elementary school administrators and CSU faculty.
3. Are any of the Success Factors related to the three motivation constructs being studied, being the affiliation motive, achievement motive, and power motive of the TC or MT? Yes. The success factors are related to the three acquired needs theory motives achievement, affiliation, and power. Given the quality of the relationship and communication was the most significant and most important success factor, affiliation played a large role even when it was not the dominant motive of the team members as measured by the TAT. Power, particularly *resourceful power* played a large role even when it was the TC who had power as the dominant motive rather than the MT. A strong need for power among the successful co-teaching teams did not appear to detract from the experience for these teams when it was a dominant need. In some cases studied here, the need for power enhanced the experience likely because it was

resourceful power rather than reactive power, helpless power, or personalized power. Achievement played a substantial role in the success factors especially as it related to feedback and coaching as well as the joy the co-teaching team members experienced when they had autonomy and flexibility to work through the challenges of the pandemic and make things better for the students on their own. Lastly, The MTs with high TAT scores for power spoke of how important it was to them that their knowledge and the way they teach be utilized *beyond their own classroom*. This was a common theme and a primary motivator for them to opt in to having a student teacher and specifically opt into co-teaching.

4. What do the TC and MT believe about how their own measured motives contributed to the success of the co-teaching experience? Each individual studied was able to describe how their own measured motives played a role in their co-teaching experience. Initially some participants were surprised by the measured motives. However, as the interview progressed and they began discussing their co-teaching behaviors and associated experiences aloud, they came to the conclusion independently their measured motives were accurate and did indeed contribute to the success. Each participant had a unique motive pattern, and each was able to articulate how their dominant motive and least dominant motive impacted the experience.
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience? As stated in the Collective Interviews section above, the pandemic had little to no negative effect on the perceived success of the co-teaching experience for the participating teams. The participants noted the impact on the quality of education for the kids. However, in terms of the co-teaching

experience, the pandemic did not significantly inhibit the success of co-teaching. The data showed the pandemic may have helped make the relationship and communication within the co-teaching team better for the teams opting into this study. Also, flexibility during the pandemic was deemed to be important. This flexibility and autonomy gave MTs and TCs the freedom to work together creatively and resolve important social and developmental issues imposed by the pandemic.

CHAPTER 5: DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

The purpose of this study was to understand what factors contributed to the success of highly rated co-teaching experiences and to what extent the success factors are related to the measured underlying human motives of the MTs and the TCs. These motives were defined by and measured within the context of the acquired needs theory of motivation. The purpose included understanding these success factors within the context of the global Covid-19 pandemic. Research was conducted through semi-structured interviews with seven teachers engaged in co-teaching during the spring, 2021 semester at four elementary schools in northern Colorado. Four of the teachers were teacher candidates from CSU, and three were experienced mentor teachers. Thematic Apperception Tests (TAT) were administered to all seven participants in the study.

This chapter discusses the findings of this study in light of the relevant literature. This chapter outlines the implications of the findings for teacher educators involved in teacher candidate preparedness and school administrators. This chapter concludes with the limitations of this research and suggestions for future research.

Discussion

Five research questions framed this research:

1. What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (the “success factors”)?
2. Are there any common success factors between the MT/TC teams studied?
3. Are any of the success factors related to the three motivation constructs being studied—being the affiliation motive, achievement motive, and power motive (as defined) of the TC or MT?
4. What do the TC and MT believe about how their own measured motives contributed

- to the success of the co-teaching experience?
5. What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

These research questions were answered by themes emerging from the data and were reported in Chapter 4. Recommendations and implications of the findings for teacher educators and school administrators are embedded within the discussion of each of these themes.

Nowell et al. (2017) brought much needed rigor and process to thematic analysis within qualitative research. The process for identifying and naming the themes for this research relied heavily on the tactical implementation recommendations from these authors. The thematic analysis process for this study began with the six-phased method outlined by Braun and Clarke (2006) with the appropriate pragmatic recommendations from Nowell et al. (2017) infused in to each phase as follows:

1. Familiarizing yourself with your data: I immersed myself in the data. I spent many, many, many hours poring over the data and reading it and re-reading it. I watched the recordings of the interviews over and over again – taking notes and thinking about the body language, the tone of voice and the passions expressed on key concepts because these are things you cannot derive from a transcript or NVivo analysis alone. Thoughts about initial codes and theoretical connections were documented.
2. Generating initial codes: Reflexive journaling was utilized. NVivo was used to examine frequencies of key words and concepts. Peer debriefing was employed.
3. Searching for themes: Case and code cross tabulations and matrix queries within NVivo were utilized. Detailed notes were kept about development and hierarchies of concepts and themes.

4. Reviewing themes: Themes and subthemes were vetted in consultation with my advisor as a team. Tests for referential adequacy were performed by returning to the raw data.
5. Defining and naming themes: Meetings and thoughts regarding themes were documented. Reflexive journaling was utilized, and theme naming notes were kept.
6. Producing the report: Committee review of the reporting and the process used for thematic analysis was incorporated. Reasons for theoretical, methodological, and analytical choices were documented and supported using relevant literature. Data collection, data analysis and report writing were interrelated and sometimes occurred simultaneously during this research study (Creswell & Creswell, 2018; Thorne, 2000).

Theme 1: Importance of Relationship and Communication in Co-teaching Teams

Researchers agree there is a need to for professionals in schools to work together in collaborative partnerships and have good working relationships in education (Wood, 1998). How co-teachers relate to one another and the strength of their relationships influence what they do in the classroom and whether or not co-teaching persists in the classroom (Noonan et al., 2003). Communication is at the very top of the list of essential components of the co-teaching relationship (Gately & Gately, 2001). Teachers involved in collaborative partnerships report an increase in creativity, renewal, feelings of worth, and partnerships (Friend & Cook, 1992). The traditional model of student teaching leaves little opportunity for relationship building (Bacharach et al., 2010). Co-teaching brings the participants together at the beginning of the experience where a foundation of professional trust and respect is established, and there is ample support and opportunity for them to nurture and develop their relationship (Bacharach et al.,

2010). The strength of the relationships between co-teachers has been found positively correlated to education quality measures including socialization and communicative measures (McCormick et al., 2001). The co-teaching literature emphasized the importance of relationships and communication (Weinberg et al., 2021), and relationship building is an important part of professional co-teacher development recommended by researchers (Bacharach et al., 2010; Gallo-Fox & Scantlebury, 2016; Van Laarhoven et al., 2007). There is substantial evidence of the importance of good, productive relationships between co-teachers (Sebald et al., 2021). In their study of co-teaching teams in two states, Sebald et al. (2021) found nearly every co-teaching team studied emphasized the importance of relationships, and recommendations by the co-teaching team members included taking the time to build the relationship between MT and TC.

Gately and Gately (2001) found the number one most important component to the co-teaching relationship is communication, and they found communication between co-teachers evolved in stages over time. In the beginning, the communication in co-teaching tends to be guarded as co-teachers learn to interpret verbal and non-verbal messages and overcome inevitable clashes of communication styles. This *beginning stage* is when the co-teaching relationship is most vulnerable to one of the team members leaving while they both develop a sense of boundaries and attempt to establish a professional working relationship moving from a social relationship to a professional relationship. It is common for one or both co-teachers to get stuck at this stage and not progress to higher levels often leading to the demise of the co-teaching relationship. As the co-teachers persist in co-teaching and become more adept and effective in their interpersonal communication, they progress to the second *compromising stage*. This stage is marked by a dramatic increase in the amount of communication and more open and more

interactive communication. There is an observable give and take of ideas and a manifest respect for the different styles between the co-teachers. Humor may signal the progression to this second stage. Trust is built during this *compromising stage*. If enough trust is built and the co-teaching relationship persists long enough, the co-teachers progress to the third and final *collaboration stage* of communication. The *collaboration stage* is marked by openly transparent communication, interaction, and mutual admiration between the co-teachers. At this stage, the two teachers work well together and complement one another's strengths and weaknesses. The high degree of comfort is palpable and is often experienced by the students and even visitors in addition to the co-teachers (Gately & Gately, 2001). Co-teaching offers more opportunity for the TC to develop these communication skills necessary to be successful where the traditional model of student teaching assumes TCs inherently possess the communication capabilities necessary to succeed in complex teaching environments (Bacharach et al., 2010).

The findings of this study serve to confirm what the literature reveals concerning co-teaching relationships. The data show co-teaching Team 1, Team 2 and Team 3 each emphasized relationships as the most significant success factor in their co-teaching experiences. This finding aligned with the three evolutionary stages of co-teaching communication posited by Gately and Gately (2001). Further, the teams progressed through these stages rapidly. Gately and Gately (2001) found the time it took for co-teachers to progress to the *collaboration stage* of co-teacher communication varied widely taking as little as a few weeks to as long as 2 years in one case. Persistence is important, and administrators and leaders who enable and facilitate persistence and the progression through the communication stages will be rewarded with highly effective co-teaching classrooms and highly satisfied teachers and students (Bacharach et al., 2010, Friend & Cook, 1992; McCormick et al., 2001; Noonan et al., 2003). If you read through the interview

responses in Appendices B, C, and D, there is evidence of the progression through each of these co-teacher communication stages within the teams self-describing their co-teaching experience as successful and opting in to this study. In as little as a few weeks and certainly by the end of the semester, mutual admiration abounded as did open communication and open interaction. A milestone indicator of progression and entry into the final *collaboration stage* of co-teacher communication is the modeling of positive behavior by the co-teachers for the benefit of students (Gately & Gately, 2001). In the cases of Team 1, Team 2, and Team 3, this modeling was prevalent, and further, it was intentional in the wake of the pandemic. Additionally, all teams and all individuals identified their good relationship and good communication as among the most significant enablers of success for their co-teaching experience.

Recommendations for Teacher Educators

Teacher educators would be well-served to educate TCs on co-teacher communication prior to the co-teaching experience and warn them of pitfalls. It would be prudent to formally incorporate such transfer of information to the TCs as part of the formal syllabus for the practicum. Strength of relationships and strength of communication clearly emerged from the data as the top two enablers of success for the teams studied here. It is recommended to include of the importance of relationships and communication found and the importance of persisting in the co-teaching experience for the entire semester. Inclusion of the details regarding the three stages of co-teacher communication (Gately & Gately, 2001) is recommended.

Recommendations for School Administrators

School administrators would be well-served to incorporate team building events and team building exercises with the purposes of facilitating communication and establishing trust between co-teachers (Bacharach et al., 2010; Gallo-Fox & Scantlebury, 2016; Van Laarhoven et

al., 2007). The results of this study confirm the importance of MTs and TCs establishing and maintaining good relationships and good communication. Inclusion of at least a basic understanding of the three stages of communication found by Gately and Gately (2001) would also benefit teachers and students.

Evaluating and modifying some of the organizational climate variables discussed in the literature review of this dissertation would be prudent. Specifically, it is recommended to focus on decreasing *conformity*, increasing *responsibility*, and increasing *warmth*, and *identity* to cultivate an organizational climate characterized by high achievement simultaneous with good relationships and communication (Litwin & Stringer, 1968). *Conformity* involves the perception members of the organization have regarding constraints or rules, regulations or procedures which must be followed. Is there a loose, informal atmosphere (low conformity), or is there a high degree of rigid structure or channels, which must be followed to get things done (high conformity)? *Responsibility* involves the perception the individuals have of being accountable and self-directed for their roles. Does the climate lend itself to having to double check all decisions (low responsibility), or does the climate give individuals the feeling they are their own boss and have the freedom to do their jobs or perform their roles within the organization independently without the need to check in with authority? *Warmth* involves the perception of a friendly non-hostile climate and good fellowship prevailing in the organization. Is there a prevalence of friendly and informal social groups (high warmth), or is the environment cold or calculating in style (low warmth)? *Identity* involves the feeling members belong to the organization and are valuable members of a working team. Is there a climate resulting in members wearing the badge proudly and it becomes part of who they are (high identity), or does

the climate result in feeling that this is just a job and they do not think about it much or talk about it much outside of the organization (low identity)?

Lastly, it is recommended to evaluate and if necessary modify leadership styles modeled by senior administration, which is likely to find its way in to the culture of leadership throughout the school – even with mentor teachers leading teacher candidates (Litwin & Stringer, 1968). Specifically, given the findings based on the data analysis, promoting the *coaching* style of leadership and eliminating the others to the degree possible would be prudent. Descriptions and definitions of leadership styles stemming from the acquired needs theory were discussed earlier in the dissertation within the *Impact of Leadership Styles on Climate and Motivation* (section of Chapter 2). Co-teachers having a high degree of freedom and flexibility emerged as a common theme for success. The *coaching* style of leadership facilitates freedom and flexibility as well as a sense of team and open communication. Other leadership styles such as *domineering*, *soloing*, and even *governing* can often suppress the kind of communication needed to build the relationships within the teams in this study where a better relationship begets better communication and better communication begets an even better relationship recursively in a “snowball effect” positive feedback loop (Kelner et al., 1994).

Theme 2: Importance of Resourceful Power in Co-teaching Teams

All three co-teaching teams had at least one co-teacher with power as their dominant motive according to the TAT results. In two of the cases it was the MT with power as the dominant motive, and in one, it was the TC with power as a dominant motive. Noticeably absent from the data was any evidence of *power arousal* occurring in the teams studied. *Power arousal* is the state or condition where two or more individuals (or teams) diminish their capacity to cope with one another or to perform effectively as a team due to power-based behavior causing the

other team member to respond in kind with their own power-based behavior. This is more frequent with people scoring high in the need for power and can result in cascading negative behaviors leading to failure and sometimes to the demise of the relationship particularly when it is *personalized power* being aroused (Litwin & Stringer, 1968).

Researchers studying the need for power have found the construct of the power motive is best analyzed and discussed along two sets of sub-constructs (Jacobs & McClelland, 1994; Litwin & Stringer, 1968). First, is to understand if the need for power involves a need for *personalized power* versus a need for *socialized power*. Second, is to better understand if the power-based behavior is *resourceful power*, *reactive power*, or *helpless power*. The *personalized power* motive or need for personalized power is identified when there is a recurrent concern toward the goal state of influencing or controlling others for personal gain or self-aggrandizement. The *socialized power* motive or need for *socialized power* is identified when there is a recurrent concern toward the goal state of influencing or controlling others for the greater good or general welfare. *Resourceful power* is identified when a person in power or authority acts on behalf of another person by protecting, supporting, inspiring, teaching, leading, or otherwise promoting the welfare of another person in a positive manner. *Reactive power* is identified when a person engages in aggressive or assertive action against someone who is usually an authority figure or someone else perceived to have power. *Reactive power* differs from *resourceful power* in that people with power or authority are often viewed negatively as hostile, evil, or incompetent rather than benevolent or helpful. *Helpless power* is identified when a person feels the need to exert power or fix a situation but lacks the resources, ability, or will to act.

There is a gender difference observed when it comes to how successful men and women think about power (Jacobs & McClelland, 1994). Successful men used mainly reactive power themes and successful women used mainly resourceful power themes. The more successful the men and women are, the more pronounced the difference. This suggests even though successful men and successful women were both interested in and highly motivated by power as a dominant motive, they thought about it differently. According to the 12-year longitudinal study involving 211 males and 180 females done by Jacobs and McClelland (1994), the men tended to have recurrent concerns related to power having negative connotations and aggressive or assertive behavior associated with those in power as though those in power needed to be conquered or overcome. In contrast, the women on the other hand, tended to have recurrent concerns related to power, which were more inspirational and nurturing like using power to improve the welfare of others and viewing power as a positive force as opposed to diabolical or negative force to be overcome.

In light of the relevant literature discussed above, the following findings are noted for this study:

1. All of the participants in this study were female.
2. The three participants who had power as their dominant need utilized resourceful power themes in their TAT imagery and in their interviews.
3. For each of the three participants with power as their dominant need, their co-teaching partner's least dominant need was power.
4. There was no evidence of power arousal in any of the teams.

Given this study involved female elementary school teachers teaching young children ages five through eight, it is not necessarily surprising to find their power related behavior and

emergent power themes within the TAT and interviews involved the *resourceful power* themes of protecting, nurturing, inspiring, teaching, and leading. However, in light of the literature, the absence of any power arousal given the very high need for power on the TAT results for some of the participants is somewhat surprising especially when taking into account the length of the entire semester and the stress of the pandemic.

Recommendations for Teacher Educators

Teacher educators should consider using the TAT to evaluate the motive patterns of MTs and TCs they plan to pair in co-teaching relationships. Themes involving resourceful power, reactive power and helpless power should be closely evaluated especially when the dominate motive is power. These TAT results may be used as an opportunity provide robust data for some of the recommended research presented later in this chapter where larger sample sizes could be employed to provide evidence as to whether or not complimentary motive patterns predict co-teaching success.

Recommendations for School Administrators

School administrators may want to consider carefully pairing co-teaching teams (whether or not student teachers are involved) taking into account each team member's most dominant need and least dominant need particularly if it is the need is power. Costly, formal TAT assessments are not necessarily required to do this. The lay person can learn enough about scoring for resourceful, reactive, and helpless power themes to make an adequate determination based on interview transcripts and the writing of creative stories using TAT images or other neutral images. Determining the presence of absence of power related themes is straightforward with a modest amount of training particularly when the need for power is very high or very low. I have observed business leaders in multiple industries do the same over the last 20 years in an

effort to mitigate the risks of power arousal as they recruit and assign team members particularly for small, close teams or when the environment will include a high degree of stress. For the participants in this study, a teacher with a high need for power happened to be paired with a teacher with a relatively low overall need for power, and the interviews revealed a mutual respect and an admiration for the teacher motivated by resourceful power.

Theme 3: Importance of Co-teaching during the Pandemic or Other Emergencies

Each of the three teams in this study identified co-teaching as enabling them to deliver a better education and better overall experience to the students. According to these co-teaching teams, they were able to better address the deficit in social development opportunities than they would have been if they were teaching solo or in a traditional student teaching model.

Additionally, they were able to model good social interaction and conflict resolution between the two co-teachers openly and visibly in front of the kids. This was done intentionally and purposefully as a response to the restrictions resulting from the pandemic. Further, during the interviews, the teachers illustrated how important it was to be able to have one co-teaching team member work with individuals one on one after long absences from quarantine or sickness while the other team member continued with education for the rest of the class. This resulted in enabling the entire class to move forward and stay on track despite the large number of students missing school during the semester. Perhaps without even realizing it, the MTs and CTs naturally employed the *supplemental teaching* strategy of co-teaching (Bacharach et al., 2010). Cook & Friend (1995) identified distinct co-teaching strategies used to enhance learning, and Bacharach et al. (2010) modified these strategies narrowing them to seven they found to be effective with MTs and TCs co-teaching together. Supplemental teaching is among those effective co-teaching strategies. The focus group research in the Bacharach et al. (2010) study found students

overwhelmingly identified the number one benefit of co-teaching was they could get the help they needed when they needed it. The teacher participants in this study identified co-teaching as the reason why they were able to give the kids the help they needed when they needed most it in the shadow of the global pandemic.

Tsui et al. (2020) pointed out teachers were in survival mode during the pandemic, and the authors compared innovation occurring in the teaching profession during the pandemic to natural selection and evolutionary improvement in the natural world. Innovation was observed in this study as the co-teaching teams worked together to develop creative ways to overcome obstacles imposed by the pandemic. Teachers in survival mode may not be able to be as creative without a co-teaching partner. Consider Team 4 of this study as an example. TC4 reported MT4 said she was “languishing” as a result of the pandemic. Whatever the underlying reasons, MT4 was not able to be fully present. According to TC4, the kids would have greatly suffered but for the continuity and redundancy built into the co-teaching model for Team 4’s classroom.

Sadly, the quality of education during the pandemic appears to be based on the students' ability, socio-economic status, ethnicity, and home language (Chizhik & Brandon, 2020; Koirala et al., 2021; Tsolou et al., 2021). Chizhik and Brandon (2020) proposed a co-teaching relationship during the pandemic could result in more productive instruction, better structure, and more equitable instruction. They described various co-teaching strategies and discussed how the models can better support the needs of diverse students in remote learning environments where they otherwise are not prone to thrive in their learning. Additional new tools and processes not yet identified are needed, which are more effective in drawing out strengths in each teacher in an online environment. New tools and processes are necessary to build better teacher collaborations and agency. Examples might include virtual reality, holographic or three-dimensional systems

enabling teachers to interact in three-dimensional, real time play with the kids in an online environment, etc.

Recommendations for Teacher Educators and School Administrators

Teacher educators and school administrators would be advised to budget and plan ahead to employ co-teaching to the degree possible especially during times when student attendance is at risk or other obstacles or stressors impede traditional education (McCormick et al., 2001). Everyone is hopeful the worst is behind us in terms of the Covid-19 pandemic. However, recently flood emergencies, hurricane emergencies, forest fire emergencies and other crises giving rise to absenteeism and other challenges will be a part of the educators' ongoing environment. It is recommended teacher educators and school administrators strongly consider deploying co-teaching as a countermeasure to help mitigate and overcome such challenges.

Limitations of this Research

This study was designed to answer the specific research questions posed. This section begins with a brief summary of strengths and weaknesses of the design of this study in hindsight for the benefit of future researchers wishing to replicate all or part of this study. The strengths of the design employed for this research include the timing of the TAT administration a short time before the interviews and conducting all the interviews relatively close to one another. Having all the TAT results in advance of the interviews was important because it allowed me to discuss the participant's motive pattern with them directly as part of the interview. It also helped guide the interviews and provided the participant insight and information on the three motivation constructs being studied in advance of the interview. This aided in the interview process and resulted in participants enjoying the interview process and wanting to go in to more detail. I carefully budgeted the time to keep the total interview length within the IRB approved time

commitments. However, these participants would have gone on for even longer than the scheduled interview time if permitted to do so. I believe this can at least in part be attributed to having the informative TAT results in advance and allowing those results to provide context and guide the discussion. Additionally, using a third-party professional firm experienced in scoring TAT submissions provided consistency of results and improved the validity and reliability supporting the credibility of the study. Lastly, I believe scheduling the TAT and interviews after but relatively close to the last day of the semester helped participation commitment and allowed participants to more easily recall details of the experience during the interviews.

Weaknesses of the design included limiting the number of teams participating and not pursuing participants earlier in the semester. Because of the pandemic, I decided to engage potential participants near the end of the semester based on school administration comments regarding teachers being exhausted. In hindsight, more participants may have responded earlier in the semester before fatigue set in from the challenges of the pandemic. It was the correct decision out of respect for the teachers and administration. Researchers replicating this study may want to begin earlier in the semester in the absence of a pandemic. Additionally, time and budget constraints required limiting the number of participants to between six and ten. More participants may have provided additional insight and learning.

Limitations of this study include the fact that only co-teaching relationships in elementary schools were examined and only elementary schools in northern Colorado. All participants opting in to this study were female and none of the participants opting in were minorities. Studying only co-teaching teams teaching kindergarten and third grade from only northern Colorado may limit broader applicability beyond the demographics represented in the pool of participants (Creswell & Creswell, 2018).

Another limitation involves doing the interviews online. As powerful as Microsoft Teams and similar online tools are, subtle cues and non-verbal communication may have been missed potentially affecting my ability to sense and inquire about areas possibly important to yet unspoken by the participant. Given CDC guidance and the current state of the pandemic, this delimitation was a prudent decision.

An additional limitation of the study was that interaction between the MT and TC pairs could not be easily controlled, and in fact, likely occurred as MT's in particular share best practices with one another and TCs share experiences with one another in an effort to enhance the success. This limitation may ironically have enhanced the results of this study, particularly for research question #2 if such discussions result in similarity of success factors perceived by the MT/TC pairs. On the other hand, deeper understanding of individual and team perceptions may have been curtailed if interaction resulted in participants feeling as though they must comply with the norms within the organization regarding success factors or the impact of the global pandemic and forced learning on motivation and their co-teaching experiences (Seidman, 2019). To decrease the potential impact of this limitation in regard to the TC and MT discussing their TAT results with one another, the interviews were conducted immediately following the interpretation of the TAT.

Another limitation involved the un-monitored administration of the TAT. Even though instructions included the importance of responding to the TAT alone without distraction or interaction with others, there were no specific controls to absolutely prevent collaboration or interaction while completing the TAT. This limitation is mitigated by social distancing habits during the pandemic. The probability participants used their limited face-to-face time during a pandemic to complete the TAT is likely low. Additionally, the TAT is often unmonitored in

implementation; doing so in this study was not unusual.

Lastly, narrowing the scope itself constitute a limitation (Creswell & Creswell, 2018). Some of this narrowing has already been discussed in this section with regard to location, grade level, demographic, and gender limitations. Additionally, the purposeful choice to intentionally narrow the scope of the study to the co-teaching experience and the acquired needs theory of human motivation as the theoretical framework may limit broader applicability of the results. Further study is required involving other geographies, demographics, and teacher preparation programs.

Recommendations for Future Research

Given all the individual participants rated the co-teaching experience as successful and the individuals within the three teams had complementary motive patterns, a large n quantitative correlation study is recommended for future research to help determine if complementary motive patterns as measured by the TAT predict the perceived success of the co-teaching experience by both team members and persistence in co-teaching experience. Future research should examine whether complementary motive patterns predict a reduction in power arousal within co-teaching teams is an additional research question. There is a gap in the literature studying co-teaching within the context of the acquired needs theory of motivation. This qualitative study was not designed to have a large enough sample size to conclude or suggest whether this finding of complementary motive patterns is significant or relevant. More research is necessary.

Additionally, it would be useful to know if the motive pattern of either the MT or TC changed from the beginning of the semester. The needs for achievement, affiliation, and power have been found to change based on the environment, and these needs can be suppressed or enhanced (Brunstein & Heckhausen, 2018; Fodor & Wick, 2009; McClelland, 1965a, 1966).

This recommended research could be done in concert with the above recommended correlation study. Further, as a potential hypothesis, there may be a larger dynamic of altruism at play within the co-teaching environment when educating younger elementary kids potentially influencing the ease with which the needs of the MT and TC on successful teams change to complement the other over the course of the semester. The MTs and TCs in this study openly discussed how they adapted often and were found to subordinate their own needs and desires to the other as to what was best for the students. Further quantitative research with large sample sizes using a control group of co-teachers operating at the high school or college level may provide evidence if the age of students predicts outcome in terms of changes in the TAT motive pattern from the beginning of the semester to the end of the semester. Are the needs for achievement, affiliation, and power in co-teaching relationships fluid and easily influenced by the motives of the other co-teacher, and does the age of the students explain or predict the viscosity or ease with which those changes occur? More research is needed to help answer these questions.

Lastly, a qualitative study of co-teaching experiences not persisting and not successful based on the acquired needs theory is recommended to learn more. Given the findings in this study regarding the presence and importance of resourceful power as an emergent theme, it would be helpful to learn if unsuccessful co-teaching experiences lacked resourceful power and socialized power within the measured dominant needs of the individuals. Determining whether or not there is evidence of power arousal in unsuccessful co-teaching experiences would be helpful in expanding the body of knowledge involving co-teaching and the acquired needs theory of motivation.

Conclusion

Teacher preparedness is foundational and has been found to be one of the primary contributors to teacher attrition and shortages across the United States (Carver-Thomas & Darling-Hammond, 2017; Ingersoll et al., 2014). This study was designed to better understand success factors making the co-teaching experience successful during the phase of teacher preparedness. In addition, this research sought to understand how success factors related to the three needs posited by the acquired needs theory of motivation and better understand how the achievement, affiliation and power needs of the MT and TC impacted the co-teaching experience. The research was designed to better understand these success factors within the context of the Covid-19 pandemic.

The data collected in this study served to provide valuable information to teacher educators and school administrators responsible for preparing the next generation of teachers. The strength of the relationship and level of communication between the MTs and TCs emerged as a dominant theme in the experience of the successful co-teaching teams in this study. Given all the teams had one team member with power as the dominant motive, the presence of resourceful power and the absence of power arousal in these co-teaching relationships emerged as a theme. Additionally, the benefits and classroom stability afforded by co-teaching during the pandemic emerged as an important factor. Ancillary themes include the importance of clear roles and responsibilities in the co-teaching arrangement and the importance of having good relationships with university coaches and the TC's cohort – each of which emerged as additional success factors. The consistent complementary nature of the motive profiles of the successful co-teaching teams may be a leading indicator and suggests a need for more research.

District and school level administrators may benefit from the findings of this research. Purposeful training and improvement in the area of relationship and team building along with more effective communication are something administrators may want to strongly consider. Additionally, quickly recognizing power arousal within teacher relationships and diffusing it or at least mitigating it through the skillful use of affiliation and resourceful power may help improve teacher satisfaction and student learning. The kids deserve the best we can offer.

REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In *Advances in Experimental Social Psychology* (Vol. 2, pp. 267-299). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60108-2](https://doi.org/10.1016/S0065-2601(08)60108-2)
- Albion, M. J., & Gagliardi, R. E. (2007, June 28). *A study of transformational leadership, organisational change and job satisfaction*. 7th Industrial & Organisational Psychology Conference and 1st Asia Pacific Congress on Work and Organisational Psychology: Better Work, Adelaide, South Australia, Australia.
- Alhojailan, M. I., & Ibrahim, M. (2012, October 14–17). *Thematic analysis: A critical review of its process and evaluation*. WEI International European Academic Conference Proceedings, Zagreb, Croatia. <https://www.westeastinstitute.com/wp-content/uploads/2012/10/ZG12-191-Mohammed-Ibrahim-Alhojailan-Full-Paper.pdf>
- Atkinson, J. (1958). *Motives in fantasy, action, and society: A method of assessment and study*. D. Van Nostrand Company.
- Bacharach, N., Heck, T. W., & Dahlberg, K. (2010). Changing the face of student teaching through coteaching. *Action in Teacher Education*, 32(1), 3–14. <https://doi.org/10.1080/01626620.2010.10463538>
- Barnes, D. E. (2018). *Modern project teams: Effects of workplace isolation on cognitive engagement, creativity, and loneliness* (Publication No. 10826587) [Doctoral dissertation, Saint Leo University]. ProQuest Dissertations and Theses.
- Bassi, A., Lochan, K., Satin, S., Singh, T. P., & Ulbricht, H. (2013). Models of wave-function collapse, underlying theories, and experimental tests. *Reviews of Modern Physics*, 85(2), 471–527. <https://doi.org/10.1103/RevModPhys.85.471>

- Bloomberg, L. D., & Volpe, M. (2008). Part I. Taking charge of yourself and your work. In *Completing your qualitative dissertation: A roadmap from beginning to end*. SAGE Publications, Inc. <https://dx.doi.org/10.4135/9781452226613>
- Boushey, H., & Glynn, S. J. (2012, November 16). *There are significant business costs to replacing employees*. Center for American Progress.
<https://www.americanprogress.org/issues/economy/reports/2012/11/16/44464/there-are-significant-business-costs-to-replacing-employees/>
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In *Handbook of research methods in health social sciences* (pp. 843–860). Springer.
https://doi.org/10.1007/978-981-10-5251-4_103
- Brunstein, J. C., & Heckhausen, H. (2018). Achievement motivation. In J. Heckhausen, & H. Heckhausen (Eds.), *Motivation and action* (3rd ed., pp. 221–304). Springer.
https://doi.org/10.1007/978-3-319-65094-4_6
- Buckley, F. (2000). *Team teaching: What, why, and how?* SAGE Publications, Inc.
<https://doi.org/10.4135/9781452220697>
- Carver-Thomas, D., & Darling-Hammond, L. (2017, August). *Teacher turnover: Why it matters and what we can do about it*. Learning Policy Institute.
https://learningpolicyinstitute.org/sites/default/files/product-files/Teacher_Turnover_REPORT.pdf
- Chizhik, E. W., & Brandon, R. R. (2020). Making virtual co-teaching work in a Covid-19 environment. *Issues in Teacher Education*, 29(1–2), 142–148.
- Clandinin, D. J., & Connelly, F. M. (2000). What do narrative inquirers do? In *Narrative inquiry: Experience and story in qualitative research* (1st ed., pp. 89-96). Jossey-Bass

- Cohen, L., Manion, L., & Morrison, K. (2011). Research methods in education. In *Research Methods in Education* (7th ed., pp. 537–546). Routledge.
- Cook, L., & Friend, M. (1995). Co-Teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*. <https://doi.org/10.17161/fec.v28i3.6852>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
- Crotty, M. (1998). *The Foundations of social research: Meaning and perspective in the research process*. Sage.
- Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social Science & Medicine* (1982), 50(7-8), 1001–1014. [https://doi.org/10.1016/S0277-9536\(99\)00350-0](https://doi.org/10.1016/S0277-9536(99)00350-0)
- Davis, R. C., & McClelland, D. C. (1962). The achieving society. *Technology and Culture*, 3(3), 51. <https://doi.org/10.2307/3100843>
- Dee, J. R., Henkin, A. B., & Singleton, C. A. (2006). Organizational Commitment of Teachers in Urban Schools: Examining the Effects of Team Structures. *Urban Education*, 41(6), 603–627. <https://doi.org/10.1177/0042085906292512>
- Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The discipline and practice of qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 1-34). Sage.
- Dicicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321. <https://doi.org/10.1111/j.1365-2929.2006.02418.x>

- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32.
<https://doi.org/10.5465/AMJ.2007.24160888>
- Esterberg, K. (2002). Observation: Participant and otherwise. In *Qualitative methods in social research* (pp. 57–82). McGraw-Hill.
- Fitzpatrick, R. (2015). *Quantum mechanics*. <https://doi.org/10.1142/9645>
- Flyvbjerg, B. (2001). *Making social science matter: Why social inquiry fails and how it can succeed again* (S. Sampson, Trans.). Cambridge University Press.
<https://doi.org/10.1017/cbo9780511810503>
- Fodor, E. M., & Wick, D. P. (2009). Need for power and affective response to negative audience reaction to an extemporaneous speech. *Journal of Research in Personality*, 43(5), 721–726. <https://doi.org/10.1016/j.jrp.2009.06.007>
- Friend, M., & Cook, L. (1992). The new mainstreaming. How it really works. *Instructor*, 101(7), 30. <https://doi.org/10.17161/fec.v28i3.6852>
- Furnham, A. (2012). *The psychology of behaviour at work*.
<https://doi.org/10.4324/9780203506974>
- Gallo-Fox, J., & Scantlebury, K. (2016). Coteaching as professional development for cooperating teachers. *Teaching and Teacher Education*, 60, 191–202.
<https://doi.org/10.1016/j.tate.2016.08.007>
- Gately, S. E., & Gately, F. J. (2001). Understanding coteaching components. *Teaching Exceptional Children*, 33(4), 40–47. <https://doi.org/10.1177/004005990103300406>
- Georgi, H. (1995). The quantum theory of fields. *Science*, 269(5231), 1742–1742.
<https://doi.org/10.1126/science.269.5231.1742>

- Gordan, M. (2014). A review of B. F. Skinner's reinforcement theory of motivation. *International Journal of Research in Education Methodology*, 5(3), 680-688.
<https://doi.org/10.24297/ijrem.v5i3.3892>
- Gordon, J. R. (1987). *A diagnostic approach to organizational behavior*. Allyn & Bacon.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication & Technology*, 29(75).
- Guterman, S. S., & Alderfer, C. P. (1974). Existence, relatedness, and growth: Human needs in organizational settings. *Contemporary Sociology*, 3(6), 511.
<https://doi.org/10.2307/2063565>
- Guyton, E., & McIntyre, D. (1990). Student teaching and school experiences. In D. J. Clandinin, & J. Husu, *Handbook of research on teacher education* (pp. 514-534). Macmillan Publishing.
- Heck, R. H., & Hallinger, P. (2009). Assessing the contribution of distributed leadership and growth in math achievement. *American Educational Research Journal*, 46(3), 659-689.
<https://doi.org/10.3102/0002831209340042>
- Herzberg, F. (1974). Motivation-hygiene profiles: Pinpointing what ails the organization. *Organizational Dynamics*, 3(2), 18-29. [https://doi.org/10.1016/0090-2616\(74\)90007-2](https://doi.org/10.1016/0090-2616(74)90007-2)
- Hinrichs, J. R., & Mischkind, L. A. (1967). Empirical and theoretical limitations of the two-factor hypothesis of job satisfaction. *Journal of Applied Psychology*, 51(2), 191-200.
<https://doi.org/10.1037/h0024470>
- Hom, P. W., & Kinicki, A. J. (2001). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44(5), 975-987.
<https://doi.org/10.5465/3069441>

- Hughes, A.L., Matt, J.J., & O'Reilly, F. L. (2015). Principal support is imperative to the retention of teachers in hard-to-staff schools. *Journal of Education and Training Studies*, 3. <https://doi.org/10.11114/jets.v3i1.622>
- Ingersoll, R., Merrill, L., & May, H. (2014, July). *What are the effects of teacher education preparation on beginning teacher attrition?* Consortium for Policy Research in Education.
https://www.cpre.org/sites/default/files/researchreport/2018_prepeffects2014.pdf
- Jabareen, Y. (2009). Building a conceptual framework: Philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, 8(4), 49–62.
<https://doi.org/10.1177/160940690900800406>
- Jacobs, R. L., & McClelland, D. C. (1994). Moving up the corporate ladder: A longitudinal study of the leadership motive pattern and managerial success in women and men. *Consulting Psychology Journal*, 46(1), 32–41. <https://doi.org/10.1037/1061-4087.46.1.32>
- Jenkins S. R. (2017). Not your same old story: New rules for thematic apperceptive techniques (TATs). *Journal of Personality Assessment*, 99(3), 238–253.
<https://doi.org/10.1080/00223891.2016.1248972>
- Jones, S. R., Torres, V., & Arminio, J. (2011). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*.
<https://doi.org/10.4324/9780203843758>
- Kelner, Stephen, P., Rivers, C. A., & O'Connell, K. H. (1994). *Managerial style as a behavioral predictor of organizational climate*. McBer & Company.
- Koirala, A., Goldfeld, S., Bowen, A. C., Choong, C., Ryan, K., Wood, N., Winkler, N., Danchin, M., Macartney, K., & Russell, F. M. (2021). Lessons learnt during the COVID-19

- pandemic: Why Australian schools should be prioritised to stay open. *Journal of Paediatrics and Child Health*, 57(9), 1362–1369. <https://doi.org/10.1111/jpc.15588>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalist inquiry*. Sage.
- Litwin, G. H., & Stringer, R. A. Jr. (1968). *Motivation and organizational climate*. Division of Research, Graduate School of Business Administration, Harvard University.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3(2), 157–189. [https://doi.org/10.1016/0030-5073\(68\)90004-4](https://doi.org/10.1016/0030-5073(68)90004-4)
- MacLean, L. M., Meyer, M., & Estable, A. (2004). Improving accuracy of transcripts in qualitative research. *Qualitative Health Research*, 14(1), 113–123. <https://doi.org/10.1177/1049732303259804>
- Magee, J. C., & Langner, C. A. (2008). How personalized and socialized power motivation facilitate antisocial and prosocial decision-making. *Journal of Research in Personality*, 42(6), 1547–1559. <https://doi.org/10.1016/j.jrp.2008.07.009>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of Personality*, 22(3), 326–347. <https://doi.org/10.1111/j.1467-6494.1954.tb01136.x>
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Sage.
- McClelland, D. C. (1961). *The achieving society*. D Van Nostrand Company. <https://doi.org/10.1037/14359-000>
- McClelland, D. C. (1965a). Achievement motivation can be developed. *Harvard Business Review*, 43, 6-25.

- McClelland, D. C. (1965b). N achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1(4), 389-392. <https://doi.org/10.1037/h0021956>
- McClelland, D. C. (1965c). Toward a theory of motive acquisition. *The American Psychologist*, 20(5), 321–333. <https://doi.org/10.1037/h0022225>
- McClelland, D. C. (1966). Longitudinal trends in the relation of thought to action. *Journal of Consulting Psychology*, 30(6), 479-483. <https://doi.org/10.1037/h0024009>
- McClelland, D. C. (1985). How motives, skills, and values determine what people do. *American Psychologist* 40(7), 812–825. <https://doi.org/10.1037//0003-066x.40.7.812>
- McClelland, D. C. (1999). How the test lives on: Extensions of the thematic apperception test approach. In L. Gieser, & M. I. Stein (Eds.), *Evocative images: The thematic apperception test and the art of projection* (pp. 163–175). American Psychological Association. <https://doi.org/10.1037/10334-012>
- McClelland, D. C., & Boyatzis, R. E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology*, 67(6), 737-743. <https://doi.org/10.1037/0021-9010.67.6.737>
- McClelland, D. C., & Burnham, D. H. (2017). Power is the great motivator. In *Leadership Perspectives*, 271-279. <https://doi.org/10.4324/9781315250601-20>
- McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review*, 96(4), 690–702. <https://doi.org/10.1037/0033-295X.96.4.690>
- McCormick, L., Noonan, M. J., Ogata, V., & Heck, R. (2001). Co-teacher relationship and program quality: Implications for preparing teachers for inclusive preschool settings.

- Education and Training in Mental Retardation and Developmental Disabilities*, 36(2), 119–132. <http://www.jstor.org/stable/23879728>
- McKenna, B. (2018). *U.S. teacher shortages—Causes and impacts*. Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/body/Teacher_Shortages_Causes_Impacts_2018_MEMO.pdf
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass.
- Merriam, S. B., & E. J. Tisdell. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Meyer, H. H., Walker, W. B., & Litwin, G. H. (1961). Motive patterns and risk preferences associated with entrepreneurship. *Journal of Abnormal and Social Psychology*, 63(3), 570–574. <https://doi.org/10.1037/h0043698>
- Morgan, C. D., & Murray, H. A. (1935). A method for investigating fantasies: The thematic apperception test. *Archives of Neurology and Psychiatry*, 34(2), 289-306. <https://doi.org/10.1001/archneurpsyc.1935.02250200049005>
- Murawski, W. W. (2003). *Co-teaching in the inclusive classroom: Working together to help all your students find success*. WA: Institute for Educational Development.
- Noonan, M. J., McCormick, L., & Heck, R. H. (2003). The co-teacher relationship scale: Applications for professional development. *Education and Training in Developmental Disabilities*, 38(1), 113–120. <http://www.jstor.org/stable/23880190>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. <https://doi.org/10.1177/1609406917733847>

- Pettit, S. L. (2017). Preparing teaching candidates for co-teaching. *Delta Kappa Gamma Bulletin*, 83(3), 15–. https://www.dkg.org/DKGDocs/2017_Jour_83-3_Systems-to-Address-Quality-Teaching.pdf
- Porter, K., Smith, P., & Fagg, R. (2006). Leadership and motivation at work. In *Leadership and management* (pp. 65-97). Butterworth-Heinemann. <https://doi.org/10.1016/b978-0-7506-6794-4.50010-7>
- Prasad, P. (2015). *Crafting qualitative research: Working in the postpositivist traditions*. Routledge. <https://doi.org/10.4324/9781315705385>
- Reader, J. (2006). Globalization, engineering, and creativity. *Synthesis Lectures on Engineers, Technology, and Society*, 1(1), 1–64. <https://doi.org/10.2200/S00064ED1V01Y200610ETS003>
- Rubenstein, R. (2001). Basic human needs: The next steps in theory development - Richard E. Rubenstein. *The International Journal of Peace Studies*. 6(1), 94-97. https://www.gmu.edu/programs/icar/ijps/vol6_1/Rubenstein.htm
- Scharff, J. L. (1999). Skinner's reinforcement theory: A heideggerian assessment of its empirical success and philosophical failure. *Behavior and Philosophy*, 27(1), 1–17.
- Schneider, B., & Alderfer, C. P. (1973). Three studies of measures of need satisfaction in organizations. *Administrative Science Quarterly*, 18(4), 489. <https://doi.org/10.2307/2392201>
- Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics and social constructionism. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 189-213). Thousand Oaks, CA: Sage.

- Sebald, A., Myers, A., Frederiksen, H., & Pike, E. (2021). Collaborative co-teaching during student teaching pilot project: What difference does context make? *Journal of Education*.
<https://doi.org/10.1177/00220574211016403>
- Seidman, I. (2019). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (5th ed.). Teachers College Press.
- Serfass, D. G., & Sherman, R. A. (2013). Personality and perceptions of situations from the thematic apperception test. *Journal of Research in Personality*, 47(6), 708–718.
<https://doi.org/10.1016/j.jrp.2013.06.007>
- Sharma, D. (2016). A Study on employee motivation in private school: A Case of Bethany Boarding Higher Secondary School (BHSS) Pokhara. *Journal of Nepalese Business Studies*, 9(1), 91–101. <https://doi.org/10.3126/jnbs.v9i1.14599>
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Soós, J. K., & Takács, I. (2013). *Psychology*. Budapest University of Technology and Economics. https://regi.tankonyvtar.hu/en/tartalom/tamop412A/2011-0023_Psychology/0000000.html
- Spencer, B. F. (2017). *The leadership chain – McClelland and his legacy*. SSCA.
<https://ssca.com/2017/06/the-leadership-chain-mcclelland-and-his-legacy/>
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. Guilford Press.
- Stake, R. E. (1995). *The art of case study research* Sage.
- Standifer, R. L. (2013). ERG theory. In E. H. Kessler (Ed.), *Encyclopedia of management theory*. (Vol. 1, pp. 255-256). SAGE Publications, Ltd.
<https://doi.org/10.4135/9781452276090.n87>

- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *Research report: A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute. <https://learningpolicyinstitute.org/product/coming-crisis-teaching>
- Thorne, S. (2000). Data analysis in qualitative research. *Evidence-Based Nursing*, 3(3), 68–70. <https://doi.org/10.1136/ebn.3.3.68>
- Trump, J. L. (1966). Secondary education tomorrow: Four imperatives for improvement. *The Bulletin of the National Association of Secondary School Principals*, 50(309), 87–95. <https://doi.org/10.1177/019263656605030910>
- Tsolou, O., Babalis, T., & Tsoli, K. (2021). The Impact of COVID-19 Pandemic on Education: Social Exclusion and Dropping out of School. *Creative Education*, 12(3), 529–544. <https://doi.org/10.4236/ce.2021.123036>
- Tsui, A. B. M., Chan, C. K. K., Harfitt, G., & Promail, L. (2020). Crisis and opportunity in teacher preparation in the pandemic: exploring the “adjacent possible.” *Journal of Professional Capital and Community*, 5(3/4), 237–245. <https://doi.org/10.1108/JPCC-07-2020-0061>
- Tuerlinckx, F., De Boeck, P., & Lens, W. (2002). Measuring needs with the thematic apperception test: A psychometric study. *Journal of Personality and Social Psychology*, 82(3), 448–461. <https://doi.org/10.1037/0022-3514.82.3.448>
- Van Eerde, W., & Thierry, H. (1996). Vroom’s expectancy models and work-related criteria: *Journal of Applied Psychology*, 81(5), 575–586. <https://doi.org/10.1037/0021-9010.81.5.575>
- Van Laarhoven, T. R., Munk, D. D., Lynch, K., Bosma, J., & Rouse, J. (2007). A model for preparing special and general education preservice teachers for inclusive education.

- Journal of Teacher Education*, 58(5), 440–455.
<https://doi.org/10.1177/0022487107306803>
- Vroom, V.H. (2015). Expectancy theories. In V. Vroom, L. Porter, & E. Lawler (Eds.), *Organizational behavior 1: Essential theories of motivation and leadership* (pp. 94-133). Routledge
- Vroom, V. H. (1964). *Work and motivation*. Wiley.
- Vygotsky, L. (1962). *Studies in communication. Thought and language* (E. Hanfmann, & G. Vakar, Eds.). MIT Press. <https://doi.org/10.1037/11193-000>
- Weinberg, A. E., & Sample McMeeking, L. B. (2017). Toward meaningful interdisciplinary education: High school teachers' views of mathematics and science integration. *School Science and Mathematics*, 117(5), 204–213. <https://doi.org/10.1111/ssm.12224>
- Weinberg, A. E., Sebald, A., Stevenson, C. A., & Wakefield, W. (2020). Toward conceptual clarity: A scoping review of coteaching in teacher education. *The Teacher Educator*, 55(2), 190-213. <https://doi.org/10.1080/08878730.2019.1657214>
- Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. <https://doi.org/10.4135/9781452230108>
- Winter, D. G., & McClelland, D. C. (1978). Thematic analysis: An empirically derived measure of the effects of liberal arts education. *Journal of Educational Psychology*, 70(1), 8–16. <https://doi.org/10.1037/0022-0663.70.1.8>
- Wood, M. (1998). Whose job is it anyway? Educational roles in inclusion. *Exceptional Children*, 64(2), 181–195. <https://doi.org/10.1177/001440299806400203>
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage.

APPENDIX A: INTERVIEW GUIDE

Table A-1

Guiding Topics and Corresponding Interview Questions

Guiding Topic	Corresponding Interview Questions
Introduction and TAT Review	<ol style="list-style-type: none"> 1. Thank you for taking the time to participate in this research. You previously granted permission to record this interview, and I wanted to make sure you still approve of recording. We are planning to record it. Do you still approve? 2. Discuss TAT results 3. Were you surprised by results emailed to you? Why or why not? 4. Did you learn anything you did not know? If so, what did you learn? 5. Discuss format of the interview
Research Question #1: What do the TC and MT believe are the top five reasons why this specific co-teaching experience was successful (the “Success Factors”) and why?	<ol style="list-style-type: none"> 6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to? 7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience? 8. Would you please describe what situations made the experience successful and why? 9. What detracted from the success? Why? 10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why?
Research Question #3: Are any of the Success Factors related to the three motivation constructs being studied – being the Affiliation Motive, Achievement Motive, and Power Motive (as defined) of the TC or MT.	<ol style="list-style-type: none"> 11. Do you feel like you understand the TAT results for yourself and have a good understanding of what we mean when we talk about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform) 12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience? 13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why?

Research Question #4: What do the TC and MT believe about how their own measured motives contributed to the success of the co-teaching experience?

Research Question #5: What do the TC and MT believe about how the Covid-19 pandemic impacted the success of the co-teaching experience?

Closing and Thank you

14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow).
 15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why? How about the recurrent concerns or worries you identified?
 16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT).
 17. Tell me about the pandemic and how it impacted your co-teaching experience this semester.
 18. How much of the co-teaching was done using remote learning?
 19. Would you say the remote learning made the co-teaching experience more successful or less successful? Why?
 20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?
 21. How about the least dominate motive? (same question).
 22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?
 23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why?
 24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss?
 25. We so much appreciate your help and participation on this research. Thank you!
-

Interview Questions

The following are the interview questions which will be asked in a semi-structured interview approach allowing for additional follow up questions into areas relevant to the research questions:

1. Thank you for taking the time to participate in this research. You previously granted permission to record this interview, and I wanted to make sure you still approve of recording. We are planning to record it. Do you still approve?
2. Discuss TAT results
3. Were you surprised by results emailed to you? Why or why not?
4. Did you learn anything you did not know? If so, what did you learn?
5. Discuss format of the interview
6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to?
7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience?
8. Would you please describe what situations made the experience successful and why?
9. What detracted from the success? Why?
10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why?

11. Do you feel like you understand the TAT results for yourself and have a good understanding of what we mean when we talk about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform)
12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience?
13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why?
14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow).
15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why? How about the recurrent concerns or worries you identified?
16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT).
17. Tell me about the pandemic and how it impacted your co-teaching experience this semester.

18. How much of the co-teaching was done using remote learning?
19. Would you say the remote learning made the co-teaching experience more successful or less successful? Why?
20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?
21. How about the least dominate motive? (same question).
22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?
23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why?
24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss?
25. We so much appreciate your help and participation on this research. Thank you!

APPENDIX B: SUMMARY OF TEAM 1 INTERVIEW RESPONSES

Table B-1

Summary of Team 1 Interview Responses

Interview Question	Summary of MT1 Responses	Summary of TC1 Responses
1. Do you still approve the recording and transcription of this interview?	Yes	Yes
2. Discuss TAT results	Completed	Completed
3. Were you surprised by results emailed to you? Why or why not?	No. Not surprised. It makes sense to me. I need to succeed and need to have influence. I can see how relationships would be lower than the other two.	I was not that surprised to know that affiliation was one of my highest scoring personality traits. I feel like that is accurate and representative of who I am. I do believe that creating meaningful relationships has always been important to me and at the forefront of what I do and how I conduct myself. I agree.
4. Did you learn anything you did not know? If so, what did you learn?	No. Seems accurate	I would say that I felt like it was pretty accurate.
5. Discuss format of the interview	Completed	Completed
6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to?	<p>Seven. It was not higher because:</p> <ul style="list-style-type: none"> • I have never really had experience doing student teaching with co teaching, and I kind of felt that it was hard to have her learn some things while we were co teaching. • I believe she just needed to have more experience on her own. • Co-teaching may have inhibited TC1 learning on her own. For example: let's say we were doing a writing lesson and we had 30 minutes to do it. I noticed we would tend to go over time. I just had to step back and let her be able to judge the clock herself in a sense and use the clock show her and say: okay, we are late to 	<p>Seven. The reason that I would score my experience as a seven is because :</p> <ul style="list-style-type: none"> • For the most part, I feel like we worked well together. We communicated well together. MT1 is a really great individual to bounce ideas off of, and she's very supportive and open to whatever I was interested in pursuing or what I really wanted to get out of my student teaching experience, which I greatly appreciated. • And alongside that, she is really great at giving feedback, the things that I was doing well, and things that I could improve upon, and also providing support and concrete ways in which I could move forward and perform certain aspects of my teaching. So I appreciate that. • Based on my previous experiences teaching at other schools

lunch. Now the first graders coming in don't get to sit down and then the janitor doesn't get to clean. By the end, we really worked on that and she was successful.

and with my cohort members, I felt like the co-teaching process was better. We worked a little bit more collaboratively and together with creating lessons and discussing and assessing students together and how that would transform into the lessons that we were implementing and creating for the students. Overall, I had a really great co teaching experience, and I felt like she really added to that experience. I'm very thankful for her.

- I felt like for most of it, I was doing it more independently. And then I would say that most of my co teachers and experiences with CSU have been just in the sense of when I was creating a lesson or when I was looking over the content that I would be teaching, I did that independently, and if I had any questions or at the end of the lesson, MT1 would give me feedback.

7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience?

- Time management
- TC preparedness

I would say my biggest concern was a clarity on what my role would be in some situations, or maybe uncertainty of my role in certain situations, like how much I would be taking over in certain cases or if there was something occurring in the classroom. Should I step in because this is the week that I'm doing most of the teaching? Or would this be something that my mentor teacher would like to handle? So just to in various moments like, is this something that I should take over? So unclear roles and responsibilities was my biggest concern.

8. Would you please describe what situations made the experience successful and why?

- TC1 was excellent at having relationships with kiddos; so I didn't have to help kind of co-teach how to build the relationships and things. She really kind of honed in on that herself.
- TC1 was very willing to do anything and would always offer to help.
- TC1's willingness to learn and try things and being positive.
- It was nice to see the student teaching handbook because I didn't really know what I was getting into in that CSU was kind of promoting this co-teaching method. I have only used UNC where co-teaching is really not promoted.

- I would say the strong relationship with MT1. We get along really well, and I think we are both open to try new things and working together and both being reflective on our practice and as well as coachable. And we're like, oh, this doesn't really work out this way. Maybe we could try this, I think, greatly impacted our co teaching relationship in a positive way.
- In addition to that, I think that using authentic moments of when we could model co teaching to our students. For example, if we disagreed on something, we could model it and how to resolve a disagreement in a positive manner for the kiddos. We could say is why and my mentor teacher could say, oh, well, I respectfully disagree with you. I think that because this and this is the reason why I like that. So I

	<ul style="list-style-type: none"> • Co-planning together was also a key to the success of the experience. • Modeling good behavior and relationship for the students. Setting an example for the kiddos was really important, and we were able to do that very well. 	<p>think co teaching in that sense is really great for our students in particular, the model that having different opinions is okay. And there's a respectful way to go about that. Or when you agree with someone or you see something that someone is doing really well, we could always say, like, oh, thank you so much, Miss MT1, for helping me do this. Or like, thank you, Miss TC1, for showing me that. I didn't know about that. Thank you for teaching me something new. So things like that, I think we're really great for our students in particular.</p> <ul style="list-style-type: none"> • So I think there were just really great moments for us to bounce ideas off of each other and model communication for our students as well.
9. What detracted from the success? Why?	<ul style="list-style-type: none"> • Confusion on roles and responsibilities. • Who was supposed to do what? • Lack of time management. • We ultimately did more of a modified co-teaching method where I would step back a bit and let her shine. 	<ul style="list-style-type: none"> • I would say maybe me not being more assertive or just better at communicating. Like, hey, would you be willing to try this or this idea? I'm just going into the experience and just what it had to offer me and what I would learn from that experience. But I would say that probably communicating my ideas or advocating for certain things that I was interested in trying or creating. • My mentor teacher was always very open with saying, if there's anything you want to try, just let me know. And I felt very comfortable with her. But I think to an extent this was her classroom and just out of respect I tried to stick to and implement, her teaching styles and follow the curriculum as best as I could of how close to what she did to try out and provide the consistency • I can see how all that lines up with my high need for affiliation
10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why?	None	None
11. Do you feel like you understand the TAT results for yourself and have a good understanding of	Yes	Yes

what we mean when we talk about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform)

12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience?
 - I would say if we are not meeting our deadlines on the clock, we're not going to achieve. So definitely achievement in regard to time management.
 - In regard to affiliation, I would say who does what role and which responsibility matters and impacts your relationship with the person that you're co-teaching with. Do you trust them?
 - With regard to power, I kind of felt like it was my role to help make sure that she achieved by the end. That was really a worry for me. I want her to be ready to be successful in a classroom.
- For achievement, as I mentioned before, I did have the goal going forward into this student teaching experience to kind of go with the flow and take what this experience had to offer me. So it wasn't necessarily a strict goal in which I had small steps in order to achieve. But I had, I guess, various things that I wanted to make sure that I stuck to within the student teaching experience. And that was one of them that I wanted to take every option opportunity that was offered to me within this experience.
- I do feel like the other major goal that I had for my students, which might be associated with affiliation. But I did want to ensure that I took the time each day to try and foster a meaningful relationship with the students within my classroom. And I felt like I did achieve that. I made a note of going around during our literacy time and trying to read with each of our students and making sure to ask them and follow up with various things if they told me to build better relationships
- As for the power motive, I don't necessarily know if I had a particular goal for myself in this case, but I just think as an underlying truth that I believe in if there's something that you need to advocate for.
- And I do believe with teaching as well, that is important that you need to ensure that you're doing everything that you can to best support the students in your classroom and meet their needs and whatever that means and whatever that takes. So I would say that I would try to do that with being intentional with my observations of the students within my classroom and making notes and actively thinking and reflecting upon my teaching practice and also the various curriculum are the various apps that we were using in the classroom and thinking, okay, what do my students need and how can I ensure that I do the best that I can to help support them and what they need and what they enjoy and where they need to be going forward? So I do think that

		was a front thought in my teaching, and I did try and implement that in my teaching. But I can see how at times that was sacrificed for affiliation.
13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why?	Same as above	<ul style="list-style-type: none"> I would say that most likely they would be aligned with affiliation and power. And for the reasons: when I mentioned that my mentor teacher and I worked well together and collaborate well together, and we were able to bounce ideas off of each other or ask clarifying questions about all, I would ask my mentor teacher, oh, why did you do something this way? Or why is this what they do to support the student in this way? Or if something? We had some kids that had some challenging behaviors in our classroom, and so I was trying to foster those relationships with them and work with them. But at times I would ask, is there a way that you would have handled this differently? What are your thoughts on this? So I would say that open communication and reflection and coachability was strong and that would be aligned with affiliation.
14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow).	<ul style="list-style-type: none"> The TC is a student as well and needs to be influence to be ready for her own classroom. I do feel like I was able to have the influence I needed. I saw it in about the third week where she was able to do the time management and build the relationships with the kiddos and plan and deliver a lesson with her teacher voice and focus on the most important parts of the lesson. The modeling we did for the students would also be put under power. And co-planning I would say falls under the affiliation because that was more about our relationship. 	With the power motive, I see it in relation to helping others achieve their goals and what they need, particularly for the population of kiddos that we worked with. They needed a lot of support with social emotional development and modeling ways to if you disagree, what does that look like, and how can you handle that in an appropriate manner? And how can it be seen as something that we have different ideas? Wow, that's really cool. How can we use that to create something new? And wow, we're each our own individual, and that something special and we can come together with different ideas to work together. And so modeling that for the students, I think would be brought aligned with affiliation and power.
15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why?	<ul style="list-style-type: none"> I guess having 13 years of experience in the classroom enhanced the need to help influence TC1 by modeling and showing how these are some of the things that have worked for me. I just think that that I'm a very relational person and I love to do things together. 	Yes, I can see that certain aspects of having a higher affiliation scoring did benefit my co teaching relationship. As I said, I feel like that would make me more inclined to be willing to collaborate and being willing to be coachable in a sense and take criticism and critiques. I guess I should try and implement that

How about the recurrent concerns or worries you identified?

- And then I also strive for achievement of that. We have to get things done, too.

or to try and try out different things and see if that works and a willingness to improve, But I also can see how, in particular, having a lower achievement and power might have hindered my ability within my co-teaching relationship with my mentor teacher to advocate or try different things in a sense or bring my own ideas to the table. My need for affiliation will sometimes outweigh my need for power. I didn't always communicate my ideas or advocate for certain things that I was interested in trying.

16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT.

- Relationship had to take a back seat sometimes like the time management piece where I realized, if we do not take a step back here, she is not going to be ready and say, okay, to kind of explicitly explain our time management. When we have 30 minutes for writing, we have to make sure that we're in the lunch room at the right time. So that way it doesn't domino and impact everybody else in the building.
- My end goal was keeping in mind that she's going to a classroom, and she needs to be ready to balance the whole picture of being a teacher. So, yeah, I had to keep the relationships in mind, but achievement is important. I needed to be modeling and make sure she was ready.
- If TC1 is not experiencing success, I can't just blow it off when I can help be an influence for better.

- As I said, a large part of my goal for myself as well as I believe, is important for teaching in general, is to foster meaningful relationships with your students. And so I do feel like I tried to do that every day from something small, like telling them good morning every day, making sure to highlight things that they're doing well, and trying to find ways for them to experience things that they enjoy or that they like, whether it be like they really like hands on things. So maybe we could try and do math with manipulatives or building it with the paper chains for that, or if they really like a certain book, if they really like Crab, let's see if we have a crab book in our pile of books so that they can read that.
- So I think that that was very important for me and my student teaching as well as with my mentor teacher and with the school that I was student teaching at to make sure that I had those relationships with all of those individuals. It was very important to me

17. Tell me about the pandemic and how it impacted your co-teaching experience this semester.

Well, our instruction was modified, so I really feel like that was a hindrance to show best practices with social distancing. Because usually in kindergarten, everything is where they're talking to each other more, you know, interacting and doing group activities. They had to stay in their seats. So that was definitely a hindrance. TC1 didn't get to see or practice some of those important social things.

- I would say there was a reduction and collaboration because of the pandemic. I would say that it reduced it greatly in terms of my ability to collaborate with other individuals within the building, especially like support staff that would come to assist our students, whether it be the speech language pathologist, the OT, the reading interventionist, the math interventionist.
- The social distancing was a challenge because we couldn't do partner work, or group work but it did get better toward

the end

18. How much of the co-teaching was done using remote learning?	None	None
19. Would you say the remote learning made the co-teaching experience more successful or less successful? Why?	N/A	N/A
20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?	I didn't really see that my ability to influence was impacted so much by the pandemic. I just really modelled for the kiddos with the strategies.	Yes. Well, based on my highest score of affiliation, which, as I mentioned before, I do agree with. I'm used to working collaboratively. And that was not really possible in some cases due to the pandemic and the distance that we needed to maintain and the protocols in place where to have a small group. If you worked with them for more than ten minutes, you had to spray down the space and leave it for ten minutes. And just because of the size of our classroom, that was not possible to have us both working with small groups at one. And so I could see how my need for affiliation and creating meaningful relationships was impacted with that with my mentor teacher is not being able to work as collaboratively in the moment of teaching with her as well as working with the students.
21. How about the least dominate motive? (same question).	<ul style="list-style-type: none"> • I also really feel like that didn't really have impact. Our relationship was not really impacted so much by the pandemic. • I feel like more than anything, achievement was impacted with the restrictions. I wasn't able to show TC1 all the best teaching practices. And in the end, that would be what achievement is all about, making the students successful and giving her best practice strategies. We did have some discussions about them. I said, well, normally when we're not in Covid like this, we would do small groups and we would rotate and such. And I kind of talked to her about it a little bit. But it is so much different when you can see it live and you can hear it and you can have hands on experience with it. 	I would say that especially since last year was different in particular for everyone. But especially this being my student teaching year, I would say that because maybe my need for affiliation and not being able to collaborate and work closely with others that maybe that also impacted the experience. I also was trying to be meaningful with providing students with opportunities to collaborate when possible.

22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?
- So I would say that Covid did not impact our ability to plan because we did that just fine. Covid did not impact her ability to be flexible. I feel like that's just her nature. I feel like Covid did not impact her ability to be positive. That is just who she is. Regarding the guidance, I think we would still have that co teaching guidance with or without Covid. The achievement was impacted with showing her best practices because there was something that we had to leave out that we couldn't show her all the best practice practices I otherwise would have.
23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why?
- Modeling good behavior for the class
- MT1 and I spent a great deal of time together because of the protocols in place. We weren't able to go and eat lunch in the teacher's lounge and things like that. So we had a lot of time to get to know each other and talk about different things, whether it be like personal what's going personal life or about our students. That was the thing that we talked about a lot is our students and different things and different curriculum and different ideas and educational philosophy. So I think that the pandemic, while it hindered our ability to collaborate with others in the building, it really did heighten our ability to get to know each other and talk with each other in that sense.
 - We had a lot of kiddos that missed preschool because of the pandemic, and so they were coming into kindergarten without that experience of social emotional development that we would typically see with our other kindergarteners. So I think having a co teacher in that sense greatly improved our ability to demonstrate those positive relationships, make sure that we are meeting the needs of our students and providing more individuals and adults and our students lives that were hopefully making a positive impact and also modeling that for them of what that looks like and communicating with others and as well with ourselves.
 - I think that the pandemic made us change certain things, but maybe it encourages us to think about things more creatively or in a different way or challenges to look at things differently. But I still think that the success factors being the ones that I talked about was that the one where I talked about my mentor teacher being reflective and communicating.
 - We had a couple of kiddos that had that struggle with positive self-talk. And so being optimistic and being positive, I think that was really great to have another individual to bounce that idea off or highlighting them or have them highlight in me that I think really did support our students in that sense.

24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss?
- I feel like another success factor that would be under affiliation is having a great relationship with <<redacted>>. I think they call her the CSU coach where we could both together help TC1. It helped that I just didn't feel alone.
 - Also having her evaluation rubric that was also helpful. And that's probably kind of under all areas of achievement, because that's where we need to get her to. This is what she needs to be successful at. And then it sounds like affiliation when we help her feel comfortable in that? And then my ability to influence to move in any direction that we need to make that stronger.
 - In the future I would probably say I might do a 50 50 split between co-teaching and the traditional model because I just don't think that the co-teaching model alone will help TC's realize the things that they need to do. I think it kind of needs to be a hybrid.
25. We so much appreciate your help and participation on this research. Thank you!
- I think this is great. Thank you for doing this research.
- I completely agree with the way you summarized and restated what I just said about modeling: that the pandemic forced us to focus on finding ways to model good social behavior for the kiddos in order to compensate for the lack of opportunity for natural social development given the distance protocols. That is perfect. Thank you for framing it that way. I completely agree with that.
- Thank you so much for doing it. You are doing a lot of hard work that is important.
-

APPENDIX C: SUMMARY OF TEAM 2 INTERVIEW RESPONSES

Table C-1

Summary of Team 2 Interview Responses

Interview Question	Summary of MT2 Responses	Summary of TC2 Responses
1. Do you still approve the recording and transcription of this interview?	Yes	Yes
2. Discuss TAT results	Completed	Completed
3. Were you surprised by results emailed to you? Why or why not?	No. Not surprised. It makes sense to me. I need to succeed and need to have influence. I can see how relationships would be lower than the other two.	I was not that surprised to know that affiliation was one of my highest scoring personality traits. I feel like that is accurate and representative of who I am. I do believe that creating meaningful relationships has always been important to me and at the forefront of what I do and how I conduct myself. I agree.
4. Did you learn anything you did not know? If so, what did you learn?	No. No big surprise	Yeah. I was surprised by the power and the affiliation. I think probably just because within student teaching, in my classes at CSU they just talk to about how important it is to build relationships, like with the kids. I thought that one would be a little bit higher. And the need for power, just like my natural characteristics. I don't think that's necessarily me or I've never really needed power.
5. Discuss format of the interview	Completed	Completed
6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to?	<p>Eight and then a ten.</p> <ul style="list-style-type: none"> I'm going to give it an eight, but probably being like a six in January and a ten for the rest of the time. And that's maybe why I picked an eight, just, you know, getting it all under way and having the kids come back into the building and kind of all of that happening at once. It was a little crazy. But once we settled into the routine and established these were my jobs, these were your jobs since we were teaching 	<ul style="list-style-type: none"> I would love to say ten, but the humility in me would say like a nine and eight or nine. But it was a dream. It was like my favorite thing that I've ever done. It was just such a wonderful opportunity to grow and learn, I think, especially after the Pandemic. And with our CSU classes being online at the end, like that last bring semester and then a little bit in the fall semester. And honestly, it was just so amazing to get to learn from MT2. She was so wonderful, and she just always listened to my ideas and what I had to say. And I had lots and lots and lots of

together. Once we got the routine going, I would give it a ten.

- I just feel like we kind of got into a rhythm. And I don't know if it was her, I think it was more of like we were teaching together. I would start something and she would just pop in, and it was very fluid, and we just really got into a rhythm and the kids could go to both of us. It just felt really natural.

questions, and she was more than willing to answer all of them.

- And she just always went above and beyond to help me out and to make me into the best teacher that I could be. And also just like the group of kids that I was placed with were amazing and so kind and sweet and so excited to learn. Yeah. It was awesome. I missed her and all the kids so much.

7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience?

- I didn't have any recurrent concerns during the semester. My main concern was what was I going to do when she was gone?
- I initially had concerns in January. And this just kind of goes back to her experience that it seems like her practicum didn't quite prepare her for student teaching. She didn't really do any small groups. So that was concerning at the beginning. But no concerns once we were in it and going.

- Overall, I don't necessarily have any concerns. I think one of the biggest things that I would stress about, though, is that I wasn't I was just concerned that I wasn't teaching the kids well enough. I just wanted to make sure I was stressed that they weren't learning the best that they could have been learning. So and that doesn't have anything to do with them or MT2. Mainly it just had to do with me is a really new teacher, and I'm a student teacher. I just wanted to make sure that I was doing everything that I could for the kids.
- I feel like I got really, really, really lucky with my student teaching placement.
- And I think not being ready also stemmed from some classes being online since the Pandemic. It hurt my preparation, and also just my confidence to a little bit, I think.
- I feel way more confident now after being you're ready to like the world on fire this fall.

8. Would you please describe what situations made the experience successful and why?

- Not being micromanaged
- Having flexibility
- TC1 was so good. I have to keep coming back to that she was just so good at teaching.
- Fluidity between TC1 and me.
- Communication

- I think relationships with the school and with MT2 and with the other teachers had a lot to do with it. They really welcomed me in. And I was pretty close with the other third grade teachers, too. I just remember the other two third grade teachers checked in on me multiple times during that day to make sure that I was okay, that the kids were good, and they were learning that the day was going smoothly.
- Also just the support that I received, and also I had a University coach from CSU that was really, really, really helpful. She was awesome. So she definitely had a lot to do with it, too. So the support was probably one of the biggest

		<p>things that made it successful. And a lot of that came from MT2 because, I mean, she was like, she was the one teacher that I've spent the most time with, and I learned a ton from her everything that she did.</p> <ul style="list-style-type: none"> • I remember before my first lesson, I was so nervous. But once I stepped in front of the kids that I had built relationships with, it kind of just felt natural.
9. What detracted from the success? Why?	<ul style="list-style-type: none"> • Her practicum experience. Lack of actual experience because stamina was missing and at first she didn't seem prepared but quickly overcame that. • Maybe I'll say this for her. She seems to have a lot of course work during her student teaching. So I did feel somewhat I didn't want to put too much on her plate where I maybe would have asked for more. I mean, she really stepped up and did everything that she needed to do. But I know she had quite a bit, of coursework to do. And I'll say, like, during my actual student teaching, we only took one class during that time. 	<ul style="list-style-type: none"> • Honestly, it was I feel like it went pretty smoothly, but I would say probably Covid and just the restrictions. And sometimes you think this this isn't how my student teaching experience should have been. So just kind of having those thoughts of the unfairness of for the kids too, when I would want to do different activities and I couldn't necessarily do them because of their restrictions. • We had to get a little bit more creative with activity because of some of the restrictions.
10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why?	None	<p>I would also say, the support from my cohort members. So just the other people from my cohort from CSU were very supportive and just getting to walk through the experience with them and meet up with them whenever we could. And there's another CSU student that was actually at the same school as me for student teaching. So that was a huge help to have her there, too, and be able to talk through everything and just our shared experiences. So I think that's everything and obviously just the classes that I took at CSU and my professors were super helpful, and it was nice to get to see them in our workshops and our seminar. So that was really good. Honestly, I could just go on and on about the support that I had.</p>
11. Do you feel like you understand the TAT results for yourself and have a good understanding of what we mean when we talk	Yes	Yes

about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform)

12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience?
 - I feel like they go hand in hand. I obviously wanted her to be very well prepared to have her own classroom in the fall, which she does. So having the need for her to achieve what she needs to achieve. But now I would probably go with affiliation that I really wanted what was best for her, and then, you know, not having her. And I'm like, what's best for the kids.
 - With regard to power, I kind of felt like it was my role to help make sure that she achieved by the end. That was really a worry for me. I want her to be ready to be successful in a classroom.
 - I absolutely want her to take what she learned and for me, what I do in my classroom and very much make it her own.
 - The relationship we had made it a 10 after January.
13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why?

The kids adored her. So affiliation. She came back on last school and she was literally a rock star. They were screaming. And I just I'm a big believer with kids seeing cooperation and positive relationships. I mean, they see if they sense it. They know when, you know, we had a teacher on a different team and their team didn't get along, and their entire grade level is a hot mess. The kids know. I think relationships make a huge difference with the kids right now.

 - I'm thinking the achievement motive in terms of what she had gotten out of her Practicum.
 - She was quite timid the first couple of weeks especially. Luckily, she said just such a quick learner that she picked it up. But the first couple of days she was tired. The practicum did not prepare her.
14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow).
 - I would say yes for the achievement. I just feel like with student teaching is something that we talked about for so long. So it was just seemed like a really big responsibility once we actually got there.
 - I guess, being afraid that I wasn't teaching well enough would probably stem from the achievement and just really wanting to do well and succeed in my student teaching experience. And then probably for my online classes, too, because I obviously want to be successful in my classes, but it's difficult when it's not the most ideal situation when classes are online. So I think achievement probably had a lot to do with it.

I would probably say grounded in the need for affiliation, not necessarily achievement or power, but just like being able to be a part of a community. And I also probably was even more important than it would be naturally, because of, like, COVID and shut down and all the things for, like a year and a half before that, like not really having a big community because we weren't allowed to see people. I think that's probably where that stems from is that was just even more important than it already would have been because of the lack of social interaction leading up to that point.

Same

15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why? How about the recurrent concerns or worries you identified?
- Yes on achievement. I expect high achievement from everyone. So not just TC2, but myself, my students, my husband. That is just the way I was brought up is you're always striving to be the best you can possibly be. Don't do something half way. You need to do it all the way. Right. Which is probably why I've been a marathon runner and we take tasks to the end.
 - High expectations are important – they always meet the expectation.
 - I think that the achievement probably does just because I feel like I have very high expectations for myself. And so that played a role and wanting to do really well and wanting to be the best version of myself for the kids. And then I think that motivates them to. Also, I want to be doing well. And if I am striving to be the best version of myself and trying to teach them as best as they can, I think it motivates them to try their very best. And if I'm excited to be in the classroom and excited to be teaching about pronouns, then I think it just helps them to be more excited too.
 - And I know my percentage wasn't super high for affiliation, but going back to that, I think, like, that has so much to do with how we built our classroom and like, how MT2 and I interacted and, like, just setting an example for the kids or even just to seeing the way that the kids treated one another was, like, really special. I've worked with a lot of kids and a lot of group of kids, but these group of kids were so good to each other and love each other really well.
 - And so I think that what MT2 and I did in the classroom setting an example for them resulted in our classroom being so full of joy and love and respect for one another. So I think that those two probably, I would say, have a lot to do with it.
16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT.
- I see them kind of related to achievement and the affiliation but less so in the power. We were kind of given the freedom to do what we needed to do for her to achieve. And then she rose to that occasion, even though she wasn't quite as prepared with her practicum, you know, both of us really care the expectations for student teaching.
 - I didn't really understand it when you sent me the graph, but yeah, now that we can talk about it absolutely makes sense. Achievement and affiliation for me.
17. Tell me about the pandemic and
- TC2's Practicum, TC2 wasn't quite as prepared
 - I think just from the beginning before I even step foot in the

how it impacted your co-teaching experience this semester.

and having to start the first two weeks online. I think it very much made it a very happy experience for everyone when we return to the classroom, I will say one thing I was worried about is as a college student that she might have not have been taking the pandemic seriously, just hearing all the news about the College students. And that was not the case at all. So that was very is reassuring that she was taking all the precautions.

- The one thing I was so worried about is we have a huge Hispanic population at my school and for myself or another adult to bring something into the classroom and have the kids take it home with really terrifying to me. I'll say another positive that we had so many kids in and out because basically they sneeze they were out for ten days and it was so great to have a second body in the classroom who knew exactly what we were doing. So we would just kind of take care of working with those kids who had missed so much of the semester. Two people helped to catch them up. Yeah.

classroom, it affected me because I was just so nervous to see what it was going to look like. And there was always a stress or a worry, a fear that we were going to get an email from the principal saying that we were going to have to go online and teach the kids online and do those type of things. So I think it was just the added stressors and I mean also just the fear of actually getting Covid because prior to being in student teaching, I was very, very, very careful.

- So it's very interesting to make the transition to spending time with 20 other people every single day and being in a school with a lot of a lot of people, I think was a very big transition, just like in life. But with student teaching.
- I really I think it was kind of hard to see the way that it affected the kids. Sometimes you would see it come out in their writing and just how they were fearful was kind of hard sometimes just to see, because obviously the pandemic affected everyone.
- But it's just even more hard to see the way that it is effective kids, especially because they don't always get a voice to express how they're feeling or how it's affected them. So I think one of the biggest things, it was just difficult to see the way that it had affected the kids.

18. How much of the co-teaching was done using remote learning?

2 weeks

We actually didn't have to quarantine. It was just the first two weeks were online, and that was when I was just planning. we were planning to just have me really observe those few weeks. So I kind of just took two weeks, to observe MT2, and then try to get to know the kids as best as I could over Microsoft Teams.

19. Would you say the remote learning made the co-teaching experience more successful or less successful? Why?

No impact because such a short time.

That's an interesting question. I think there are probably pros and cons to it. I think a pro would be I didn't just step foot in the classroom on the first day school, and it was just some random new face. Like, I had some time when everything was virtual, and the kids kind of saw me and knew that I was a student teacher and they knew my face and my name by the time I met them in person on the first day class. I guess that would be a pro. That was probably the only one. I would say a Con would just be that they weren't learning as well when we were online

because they were in person and they were on their computers. So I would definitely say that there were more cons and pros to being online those first two weeks.

- | | | |
|---|---|--|
| <p>20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?</p> | <p>I think my need for affiliation helped. It was just coming out of ten months of being alone in your house talking to a computer. I wanted a relationship with the kids and with TC2. I think it was that aspect which was really, really helpful.</p> | <p>I think it definitely helped me to rise to the challenge because I do really strive for excellence. I guess you could say and have high expectations on myself that I knew that there were going to be struggle going into the pandemic. I think I just was trying that much harder to do what I could and trying my best because I knew what I was going to be facing, something that I had never experienced before, like teaching during a pandemic. So I think you just push me to try even harder than I would have naturally.</p> |
| <p>21. How about the least dominate motive? (same question).</p> | <p>With power, I would say I don't and didn't feel the need to put myself in a position of control. I didn't say to TC2 now this is the way you have to do it because this is how I did it.</p> | <p>I guess I would say that it challenged in a way. It challenged it. The pandemic did because things are and have been so different in interacting with people that it probably challenged a little bit because I kind of fell into a comfort zone of my family and then just like our little group of, like our little classroom. So I guess I would probably say that it challenged it because I kind of just wanted to stay in my bubble and in my comfort zone.</p> |
| <p>22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?</p> | <p>Being able to record lessons helped with the flexibility.</p> | <p>I don't think that the Pandemic took away from the success factors at all. I just think that I was supported in much different ways than I would have been without the pandemic. Like my University coach, I've never even met her in person. All of my meetings with her were online, so that was definitely different. But I still got to know her really well and received really amazing feedback from her. And I really got to know her, even though it was through a screen, even my cohort members, I didn't get to see a lot of them in person.</p> |
| <p>23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why?</p> | <p>The relationships were strengthened. You know, that need for affiliation kind of like that. Being at home in front of a computer for so long and then being back in the classroom, being with another adult in the room. We were all looking for relationships, right?</p> | <p>I guess I would probably say that obviously our cohort is very close and supportive of one another, but it's almost like we needed each other more because of the pandemic. So we lean on each other more because of the struggles and the just the unknowing of what student teaching was going to be or just</p> |

different obstacles that we probably want her face without the pandemic.

24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss?

No. We pretty much covered everything.

I think I would just like to rave about MT2 for a minute. She was just so amazing. I've had so many professors, amazing professors and so many amazing educators growing up. That's why I want to be an educator. But MT2 has been the best teacher that I've ever had in my entire life and she didn't want to change me. She just wanted me to be the best teacher that I could be. But she just gave me everything that she had. And like, let me decide and let me choose the kind of teacher that I wanted to be. She's just like, very accepting of who I was and the kind of teacher that I was and just like my personality. And she's always just, like, very encouraging. And I would always ask her after my lessons, they're like, okay, what could I have done better? And she'd give me, like small things here and there. But mostly she would just say, I would have done the same thing. I would have taught it the same exact way that you did. And that always made me feel so good because I'm like, okay, if I'm teaching the way MT2 is and I'm okay to do great. Yeah, she was very encouraging. And I could not have asked to be placed in a better school or classroom or with a better mentor teacher. She even has, like next semester or like when I have my own classroom, she's like, text me, call me whatever you need. Like, I'm here for you. So it was just really awesome. I just like, she was totally on my team. Like, she was just cheering me on, wanting me to do well and was just so helpful. And seriously, I asked so many questions and she never once got annoyed with a question.

25. We so much appreciate your help and participation on this research. Thank you!

Of course you are so welcome. Send me another student like her.

Thank you.

APPENDIX D: SUMMARY OF TEAM 3 INTERVIEW RESPONSES

Table D-1

Summary of Team 3 Interview Responses

Interview Question	Summary of MT3 Responses	Summary of TC3 Responses
1. Do you still approve the recording and transcription of this interview?	Yes	Yes
2. Discuss TAT results	Completed	Completed
3. Were you surprised by results emailed to you? Why or why not?	No. Just maybe being I was a College athlete, so I would assume my need for achievement would be higher, but maybe not.	I don't think so. I think it falls pretty true to who I am as a person I like to achieve. I like to learn. I like to do things. And I run half marathons and I run Spartan races, which are like obstacle course races. And I've always been a field hockey player for a very long time. And so the need of for achievement, I guess, Yes. True with that as well. The need for affiliation perhaps is a little lower than what I expected, but then I can be very I'm very outgoing as a person, but I also like to have time on my own and be, you know, alone and read a book. And so perhaps the need for affiliation is that's accurate on that balance of being outgoing and wanting to spend time with other people, but also spend time on my own and need for power. I don't really want to be successful, and I want to do well in my life, but I don't think I need to do it in a way that is, you know, power can be interpreted in a lot of different ways. Yeah.
4. Did you learn anything you did not know? If so, what did you learn?	I did not know my need for power would exceed my need for achievement.	The power and the affiliation being relatively similar. That's something that's a little interesting to me based on, I guess you want to as a teacher, you want to make relationships, build relationships with other people, and you have a lot of influence, and you have a lot of responsibility to do. Right. And teach and set children up for success long term, not just in the short term. So I think those to me, in a way, it makes sense if they're similar, because I think they interest one, get relate to each other in that you can't really have to I don't

think you can really have power without having relationships with other people and, you know, having jobs and positions that put you in a place of power and to have those positions, they need those relationships. The need for achievement, I think, is probably pretty accurate if I take a good look at myself in my life. So I'm kind of almost surprised it's not a little higher.

5. Discuss format of the interview Completed

6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to?

- Thought it went really well. I mean, I would give it as close to a 10 as I can. TC3 is my 12th student teacher. I have one every year. Actually I would give it close to a 10 or a 10.
- There are a couple of reasons. I think she was competent, which helps. And then she and I found working together, I think, pretty easy in that we kind of, like, fell into a good pattern. Our classrooms are really small. We kind of fell into the space pretty naturally and easily, which I think makes that transition easy. We could communicate when we needed to and didn't have to when work was to be done and stuff. And so it just felt like less effort compared to some of my other student teachers in the past.
- Communication was key.
- And I think some of my student teachers have been a bit younger, and she's been in a work environment before. I think she came from a business background. And so it's just like sometimes when you get young student teachers, they don't know when to jump in. TC3 instinctively knew when not to jump in and when to just step back and when she should jump in and can jump in.

Completed

- Would say a good nine and a half to ten.
- The communication levels were always open and high communication levels were high. The communication was always open between us. I felt very respected, and it equal to her. Even though I was just starting out with my student teaching and co teaching model, we collaborated what really well with not only the two of us, but also the other kindergarten team members and also the K-2 team, which was like the group that they do K-2 to three to 5. So the K-2 team, we collaborated really well with them.
- Yeah, it came down to the nature of the relationship that we built together that allowed us to perhaps. I mean, I don't know, it's probably true for you, because you haven't witnessed a lot of what the co teaching relationships have looked like in the classroom. Or is there any of them? But I think we both got along on a level that we were in sync in the classroom. We would bounce off each other, and we back each other up in terms of when you need to to guide a child away from doing something they shouldn't be doing or nurture a child when they've been having a hard time with another child or teaching like our philosophies of teaching a very similar. And so it made it relatively straightforward to pick up where she had built foundations and then continue forward. Does that make sense?

- Yeah. It really didn't feel like any competitiveness. It was like she didn't have to prove herself, but yet she was very open to suggestions. And I don't know, she was just really easy to work with, but then paired with competence around people, which I think she has adults and children. Having competence around how to talk to children and how to interact with kids is something I think you don't teach. I don't even know how to teach it.
 - I think you can get better at it, but I think some people just have it. I think she just kind of has it the relationship skills, I guess, with adults and everything.
7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience?
- Sure. Well, I think any time anytime I'm hosting another adult, my most recurring concern is that she is having she's getting what she wants from the experience. We also had a really great class, and so I always think about where my student teachers are going to go next. And if this. So we have 13 kids in our class, if this experience is setting them up for success, possibly in a public school or in another situation. So that's a constant like, thought. And how can I given the situation we're in right now, how can I make sure they are prepared for what a bigger classroom or what a public school experience might be?
 - And then it's TC3's well being, like, how is she coping with all of the work outside of the actual classroom she has to do, turning in all of her artifacts and all that stuff, and then just making sure that I'm supporting her through that, you know, filming her when she needs to be filmed or some stuff like that, it gets to be a lot in a small amount of time.]
 - And then it's always the thought of what's next, because I know that's what was on her mind, right. How do you stay present in our classroom, but also
 - Honestly, I don't think they really were any. It's an independent private school, so we have flexibility to kind of adjust the schedule as needed based on how the kids are feeling on any given day. So, for example, on a mega snow day that we had this year, the kids went outside for. They got absolutely drenched covered in snow cold. And then they came back in, which is when we normally would do our math block, and we just put storyline online on for them and made them hot tea.
 - And so we aren't restricted by you have to do you have to cover this unit on this day? Otherwise, if you get behind, then you're going to be behind for the rest of the year. I use that as an example because I think it's important to cater teaching and learning to the children and picking up on I don't want to say vibe, but basically a vibe or a feeling in the room at the time based on what the kids needs are and whether they're being met and taking the time to talk through any issues I've been having or at home or in school or wherever.
 - And all of those things, I think in regard to the school. Their scheduling was a little bit of a kind of all over the show. They specialize. They like to promote special subjects. But then therefore, it means there's less time for literacy and numeracy learning, which is also

recognizing that she's not going to stay in my classroom next year; so she obviously has to think about what's next, right?

critical foundation for kids learning.

8. Would you please describe what situations made the experience successful and why?

- Being highly competent around people.
- Knowing when to jump in and when to not jump in.
- Good communication is key.
- And relationship skills.

- I mean, every day we would separate the children into small groups. They were predetermined small groups for both literacy and numeracy based on student ability level. So different. They were different for literacy compared to math. During the time of day when we had these small groups, MT3 would take a group, I would take a group, and there would be a group doing like a literacy into. And there were times when we could just look at each other across the room, and know it's time to rotate or afterwards, or before we would communicate about what we wanted to do. Or we would communicate afterwards about what went well and what we could do better next time. And we pretty much did that instant reflection while the kids were lining up to go outside for recess, or they were getting themselves organized for lunch or snack or whatever. We would take that time just a minute or so to communicate about what had gone well and what we could do better the next day. They were time when we were planning where I would come up, I would have some ideas and she would run through them.
- And then we would figure out if it was age appropriate or, you know, along with the lessons that we were actually planning to do going forward and whether we can incorporate it or what we could do to make it better or just tweak it slightly to, you know, enhance it a little bit. They were just slot. It was just like you would come in in the morning and we talk about the plan for the day. And yeah, I think it was perhaps it's not to do with the co teaching.

9. What detracted from the success? Why?

- I've had student teachers in the past that focus almost entirely on what's next and aren't present in the classroom. And that creates a bit of conflict, you know, between my student teacher and I, because while I understand what's next, she still has a job to do in our classroom with our children. And sometimes that can bring up some conflict. TC3 handled that seamlessly actually kind of doing both at the same time.
- I think a handful of my student teachers have really wanted to do their school work in the classroom. And so I've had to have conversations around, like, you know, when you're in the classroom, I want you being present here? And so your reflection can be written at home or whatever, because, you know, there's a ton of paperwork that comes with being a student teacher. You have to fill out formalized lesson plans and all that stuff in sometimes that work takes over again, being present with the students.
- And maybe that's also just my teaching model. And I think when we're here, we're here, when we're at school, we're at school and the kids deserve all of our attention. And as a student teacher, you're not the assistant. You're not sitting in the back room in the background typing out your typing out your lesson plans and stuff. Like, I
- But I think one of the fundamental things that worked for us was that if we were having a bad morning, we would get to school. We hadn't slept very well. We hadn't. Whatever something had happened at home, we could go to school, talk about that, and then the other would lift the other up for the rest of the day and to make sure that sorry about the dog, to make sure that the other was always okay going forward. I think that to me helped because it was you then felt like you belonged.
- You were looking after the other person. They were looking after you and then for you could work really well together for that whole day.
- Honestly, I think it's not necessarily to do with co teaching, but to do with the way that the schedules are lined up here a lot in the United States. You can totally tell from my voice. I'm not from here, but we did 20 weeks in a row before we got one week off. That's a lot of, you know, being on in front of children for eight, 9 hours a day. So it gets tiring and you might be short with somebody.
- The planning kind of starts to go out the window. Reports need to be written. So you're not taking as much time to communicate about this child had a bad day. How can we help them tomorrow? So I think it's perhaps the amount of time. I mean, everybody could always have more time in their lives, but the amount of time I think we had to plan and write reports and also get enough time to, like, decompress for me day and each week, depending on whether it was a easy week or hard week or just a rough day or whatever.
- Yeah, I think that was probably tricky. It just became like every day was almost the same. You just kind of got up. You were a robot, almost going through the motions rather than actually being present, fully present in the classroom, taking the time to teach kids. And I don't think that's a perhaps it is a co teaching thing where we could lift each other at times. But then there were also days we were both really tired and both sort of not really there. And that made it tricky based on again, factors

would expect that, you know, they're in with the kids and really functioning as a teacher. And I think some of that depends on the competency and the comfort that the student teacher has, like being around the student.

that were outside of our control being the length of the semester and terms within it.

10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why?
- None

I think that captures it a lot. I don't know if you've done this with MT3 yet, but she's she's just phenomenal. She puts all of the children first all of the time. You write some little thank you notes to, like, if they've done, if they wrote her a card, she'll write them, I think, and send it to them in the mail. And I know that sounds so small and kind of insignificant, but to a five year old that I don't I'm an adult. And I still love receiving mail Yeah. She's wonderful. She really thinks through, you know, all of the activities that we plan and we put play first and but incorporating interdisciplinary methods and standards and trying to figure out how you can incorporate real life examples into all of the teaching and giving children skills to build independence and problem solving skills and communication skills. And I think we both believe that believe that it starts from the youngest of ages when you can start, like when kids start having an issue with another kid in a playground, it's like two years old, three years old. And I think problem solving skills and communications can start from that age, and they set you up for the rest of your life. So I think they really, really critical and important, but also giving children the time to play and have fun and enjoy. Like be curious and, you know, just want to learn rather than come to school because they have to. And she really fostered a culture of all of that in her classroom. And I hope I'm able to do the same in mine.

11. Do you feel like you understand the TAT results for yourself and have a good understanding of what we mean when we talk about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform)
- Yes

Yes

12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience?
- So it actually probably doesn't surprise me that I score low on achievement. I don't know. This is where I guess my student teachers need to achieve. Whatever she needs to achieve is kind of on her. I just believe my model of teaching is more the relational and getting to know the kids. And so that probably doesn't surprise me. I don't know. I wonder. TC3 and I also agreed a lot style of teaching and how we believe children learn and what their schooling should look like, actually, with similar, I think.
 - I mean, I was there to learn myself and to gain experience in a co teaching environment, I had to do certain things to achieve my degree. Right. But I also wanted to I've always been a person to continue to learn. I've just graduated from my master's degree, and now I'm already looking at what else I can like, what's next? So I think, you know.
 - Like the student teaching and co teaching semester was gosh. There was so much there were different ways that I could learn through MT3's observation of my teaching. There are several times when I asked her or another teacher to come and observe and give me feedback on how I was doing and whether I was using the right language or we're putting things a certain way. And he just said, You're incredible, too, because you adjust based on who's sitting in front of you, who's in your group, what you can like the small all group sessions I was mentioning before, if we had one group, then you adjust to the next group.
 - I think the communication between MT3 and I really helped as well, because I could just ask her now, you heard me talk to this kid over here about an issue they were having and help them problem solve. What did they do that was good, and what could I do to do it better next time? And that, to me, is all part of achievement. Yeah. Those are probably the biggest example. I mean, affiliation, I think most importantly for me, was the relationships I could build with the children. I think, as I mentioned before, and I hit it off straight away. And we had a really great working relationship throughout the whole semester, which then made it easy to then spend the time building the relationships with the children in her class.
 - And I think I did that very well as well. I think I've always had sort of an affinity with children, which is probably what drew me to teaching after a career in private sector.
 - You know, I think getting down on a child level and really asking them how they're doing and how they're feeling and getting to know their fan, like asking them

questions about their family and what they like to do when they're not at school. And things like that, I think really helps to for them to feel like someone's interested in them, for them to feel like they're capable for them to feel like, oh, this person really wants to know me and know my family and help me learn, which I think is critical to teaching and any level.

- | | | |
|---|--|--|
| <p>13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why?</p> | <p>You know, having a student teacher isn't always the easiest, but it is absolutely something that I feel like I this is so interesting, because it's the influence I can have over the world of education. Like, I only can. I can only teach the class that's in front of me, but I'm hoping my reach expands with every student teacher I have. I see the power motive there. Yeah. I mean, that's, like, my biggest goal in having student teachers is that, you know, to put good quality people in front of children – not that my way is the only way to teach. But of course, I do what I think is best for children. And then the more people I think that are in front of children with my beliefs or whatever, you know, I think extends my reach in education.”</p> | <p>Probably affiliation. That's what relationships give - a sense of belonging and a sense of you can do it and you can be successful and you can continue to learn and that somebody supports you to that is something that rings true for the entire semester through co teaching and teaching children or co teaching, the relationship between MT3 and I and then the co teaching of the students. I don't think any of us can do anything in life without relationships with at least some people here.</p> |
| <p>14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow).</p> | <p>My concerns were for her achievement; so I guess that is rooted in power for me.</p> | <p>Same</p> |
| <p>15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why? How about the recurrent concerns or worries you identified?</p> | <ul style="list-style-type: none"> I think a little bit of what we've already talked about. I don't think anybody can do well if they're not comfortable. And so maybe that's the affiliation. That what's the word, I guess, like being conscious of how she is and how our relationship is and how she feels, I think make for a co teaching experience if if I really didn't care about her well being and I don't know how you could co teach in such an intimate environment. | <ul style="list-style-type: none"> So I think a lot of what I've learned I learned in the corporate sector, private sector? Sorry. When I used to be an event manager and a whole bunch of other things in the private world, I learned what it was like to not have good relationships with people, even though I would try. I learned what my strengths and weaknesses in building those relationships. I think one of the best assets I bring to any situation is my adaptability. I have always been able to talk to people from all sorts of places. |

- I mean, it's a small space. It's, you know, you're really with each other every day, you know, and teaching kind of takes up your entire mind during the time you're in it. I think that has to contribute to the success. We also both agreed that that is probably and it's interesting because
- I don't know if we talked a lot about having the kids come back after Covid after having spent six to eight months kind of isolated it on their own and how their social relationships.
- And we added some more play time into our day and just talked about that need of children this year kind of taking precedence over, like, what reading level they're at and all of that stuff. And so I mean, I just agreed on that, and it's hard to tell because she hadn't taught before. So I guess I don't know now that I'm saying it I don't know if she disagreed with me because, you know, here I am with 13 years experience, and here she is with zero.
- And so she should just agree with me. I don't know. But it seemed like we kind of meshed on on all of that. But now, looking back, who knows? She really would have thought that or if she could have been influenced by somebody else who thought differently
- If I can get to the bottom of, you know, kind of what makes TC3 tick and an environment that she would feel good in, we can kind of figure out what school she should be in and that kind of stuff. And I think that maybe that my need for power to influence her. I want her to be well, and I want her to end up in a place that fits her.
- I think everybody can find at least something in common with everybody else, and then you can build communication and conversation from there. I think my willingness to learn as well, my willingness to get stuck in and just give something a try also really help in a co teaching situation.
- I guess there's a lot of affiliation. I think we've established that that's an important factor for me. I think I try always to an achievement. Achievement is like you pass a test, get a grade. But I think there's so much more that goes into that that rather than just set in result. Right. So you think there's always there's always stuff that can be learned. There's always room for improvement and being open and willing to continue to learn, I think, leads to higher levels of achievement. I don't know.
- When I moved to the United States, I had sort of a fresh start and a total change of tech going from event management and HR to teaching. And perhaps there is still some similarities between those with the affiliation piece where you have to build relationships and event management. You are literally looking after hundreds of people on a daily basis, same as in a classroom. You're looking after these little children and teaching them. And I think, you know, you don't I don't believe you know anything until you're taught it, or you go and learn it yourself, including as an adult.
- So perhaps that part of that philosophy, part of the philosophy I mentioned before or about nurturing children to communicate and problem solve. Those are that I bring to the table because I have been there and where people have. I've had to learn in my late twenties what it's like to know how to use my words to problem solve and communicate with

other people and speak my mind and stand up for myself and things like that. I wasn't taught those skills at a young age. So I think that's an asset I bring is, you know, maybe if you do more years of experience in the world versus kids who are straight out of College into a master's degree and straight out into the world after that?

16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT.

- Not every school is for every teacher. And I had a co teacher actually was really she was only in her second year of teaching, and I felt like I did the same thing for her, like directing her towards excellence. So that is power. And again, it does feel a little bit like Boasting, because who am I to tell other adults? Like, where I think they fit? But just based on the experience we had together, I think some schools are just better fits and some jobs, you know,
- It's like tell me what you're about and what motivate you and pick for you so we can get somewhere we can settle on options that would feel right, I guess.

I mean, seems silly to always be coming back to affiliation, but I think that where it starts. You build relationships and then you can scaffold from there in whatever direction you need or want. If you can't communicate with people, then it makes it really hard to learn and grow. And he has influence over all with people or achieve. When I say learn and grow, I think that's by sending them for achieve

17. Tell me about the pandemic and how it impacted your co-teaching experience this semester.

It's just weird. We're very fortunate. We got to be in person all year. Our class didn't have to go remote at all this year, so we're very fortunate for that. But and we have a full day. We have the luxury of time where we can now we can give them time to play as well as getting the stomach. But it had to take priority this year, and it makes me rethink my every by every year teaching. Like, these guys are five. And like I said before, they're all going to be fine. These kids all come from great families and families that value education. And but maybe it took a pandemic to realize when you take out that social piece where they will struggle.

- If at all, I'm not really sure that it did. I think we managed to co teach effectively. Regardless. I think we were very lucky to be in person, you know, then perhaps the times when communication got missed because we were in masks and we couldn't read each other's lips or see each other's face fully to know what the other was saying. But other than that, I don't think we were really that affected by it at all.

18. How much of the co-teaching was done using remote learning?

None

None

19. Would you say the remote

N/A

N/A

learning made the co-teaching experience more successful or less successful? Why?

20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?

I don't know. I don't know, because I think not a ton changed for us. Like it felt pretty I felt fairly normal. However, I think offering any that experience to teach in the classroom was something that was great. You know, however, and again, kind of went to that, like, am I preparing her for what job she might get next? So that is power – right?

I think perhaps the only this is like a benefit and like, sorry, a positive and a negative. That when I was doing, like, observations and assessments of my teaching, a lot of them had to be done through a recording. Obviously, MT3 could do some in person because she was there with me. But if there were other teachers in the building or my teachers from CSU who needed to assess my understanding and learning, it had to be done through a recording. And I don't think that was an accurate portrayal of, like a day to day life in a classroom because you get the snippet of six minutes, ten minutes. And yes, you can read a lot in a ten minute snippet that you I think in the past I think they've come in for maybe an hour and a lot can be seen in a lot and be adapted in an hour. So I think that perhaps was affected. But to me, that would be the only thing that was really affected by the pandemic related to achievement, isn't it?

21. How about the least dominate motive? (same question).

Since my lowest motive was achievement, the one thing that comes to mind is we took a little bit more time for recess and a couple of things like that due to the pandemic, because it was a chance for us to take a mask break, you know, whereas previously I might have held on to, for example, a recess time more tightly. I think we were a bit more free in that all while in my head thinking about what are we giving up in the classroom? And so having to make some decisions around that, I think probably affected it, you know, and, you know, still, like scoring on assessments and some of their reading scores and stuff, like, while we did agree that relationships in that play and that social interaction really took precedence this year, I think there was still in the back of every teachers mind, like, are my kids getting what they need? And are they going to be when you pass them on to the next grade? What will they think? Will I have done enough to prepare them? Will they be behind? I think that's, you know, maybe every teachers and parents questions and

None

going to set my kid back academically, right?

22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?

- Yeah, it's tricky because I think, of course, to say that the pandemic didn't affect our school year is it's ridiculous. But sometimes I think you just figure it out. You know, it just is what it is. And, you know, you work to give these kids the best experience they can they can have. And I think I mean, there has to be some negative, you know, right. Like, I didn't get to know the families as well because they weren't allowed to come in. And that's a huge part of the relationship building that you have.
- You know, TC3 didn't get to interact with the parents a lot. And, you know, I think especially working with little kids that matter so much. We never had our classroom for planning time and stuff like that. And so I have to imagine the experience TC3 had in planning for the planning and getting out materials, and that had to have been not as great just because we didn't have our classroom. All of our special classes and lunch were in our classroom. And so we didn't have a lot of time, you know, just professionally to outside of school.
- I mean, outside of during our planning time, we're like in the teachers lounge with everybody else, you know, so there's stuff like that that I think, of course, negatively affected. But in the grand scheme of things, like we weren't at home on our computers, we were in person with children, you know, stuff like that, I think probably went as well as it could have been.

23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why?

Yeah. It has to be interacting and learning how to be in a group of people. And you can see it more so in some kids than others, probably kids who struggle socially anyway. But yeah, it's huge. It's huge to just help skills and executive functioning skills and stuff like that, you

I think it would depend on the age. But for me, it's going through the pandemic last year before this co teaching semester. This year, it really how do I articulate this right? Reinforced the importance of relationships and the need for affiliation with other people. I don't see how any child can figure out how to self-regulate, how to take turns or share, how to communicate the something happen they don't like or something happened that they do, like when they don't have the opportunity to mingle, play, be in the presence of other kids their own age and ages around them. So it really reinforced for me how important it is for kids to have time to do that, for kids to have a space that's safe and encouraging for them to do that. Those relationships communicate problem solve.

And so during the student teaching semester, co teaching with MT3. I think it was just reinforced even more for me that this is it's critical to their lifelong learning have been a place and being able to have teachers that can communicate have, you know, and then I have the same or similar philosophy that when

really realize when they're home with their parents and the only one they miss out on that stuff and just the ability to get into imaginative play and that language development and all of that stuff that, you know, that happens when you're in a place scenario. It's really important.

you're talking to children, helping them solve their problems, you're on the same page. You're not saying one thing to the child, and then she's saying something else, and then so giving them space to try and figure out the problem on their own rather than stepping in and being like a helicopter teacher or parent or whatever. I think that's an impact that the Pandemic had on me was really reinforcing the need for us to have social interaction with people of our own age and other ages I don't think so. I think I covered a lot. We've covered a lot.

24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss?

No, not specifically

25. We so much appreciate your help and participation on this research. Thank you!

Yeah. It's interesting because co teaching is the kind of kind of the buzz word. And even I think <<redacted>> School District has really concentrated on co teaching, and a lot of I think their teachers had to go through some training. Kind of cool as a whole district. So thank you for your time and your work on this.

Thank you.

APPENDIX E: SUMMARY OF TC4 INTERVIEW RESPONSES

Table E-1

Summary of TC4 Interview Responses

Interview Question	Summary of TC4 Responses
1. Do you still approve the recording and transcription of this interview?	Yes
2. Discuss TAT results	Completed
3. Were you surprised by results emailed to you? Why or why not?	I guess I would have thought that my affiliation would have been higher than my power. So that was interesting to me. Yeah.
4. Did you learn anything you did not know? If so, what did you learn?	It's so interesting. I mean, I assume I have two adult daughters trying to find their way, and I am very much influencing them right now. I feel my jam is a relationship. So I was surprised the power was higher than the affiliation. Not so surprised it was higher than achievement. I've been a mom. I was an at home mom until my kids went to school, and then I worked in their school. And the reason I'm doing this master's degree so late is because I was just kind of, I guess, the glue that held the family together and let everybody else do their thing. And I finally decided I want to do my thing.
5. Discuss format of the interview	Completed
6. On a scale of 1-10, how would you rate the success of your co-teaching experience this semester? Why did you rate it the way you did? What frame of reference or other experiences are you comparing it to?	<ul style="list-style-type: none"> Well, this is a really hard because I have different categories. I want to put it into kind of I think that Covid made it really difficult. MT4 liked to use a term that she'd heard from of a doctor that the grief and the things we're all feeling during Covid was languishing, that we were languishing. And she admitted that she was languishing. And at the end she said, you know, I wish I'd done more for you when it came to the teaching aspect. I had worked with MT4 before. I was so impressed, and I knew I would learn a lot from her and asked to be in her class. And I didn't see as much as a student teacher. And I just I think it was because it was such a hard year since March of 2020. It was so hard. And she was just trying to hold herself together and do what she could for the kids and for me. And I think I have a lot I have a lot of experience in the classroom and as a substitute. And so I feel really ready to teach if I didn't have what I came into student teaching with I think I'd be floundering if I went started my first classroom this year. I know she's a fabulous teacher. And also on my part is I probably should have pushed her more for some stuff and maybe because she was languishing. And then I thought, oh, I am, too. And, you know, these kids were doing great. And, like, we really enjoyed the time spent with the kids and the time together, but I

- probably could have got more out of my student teaching had been a different year.
- I'd say given Covid circumstances, I'd say an eight at a ten. If the exact same situation happened and Covid wasn't around, I'd say four or five.
 - MT4 did take a lot of days off. And when she wasn't there, I feel like I really flourished because I could just be myself. And I really compartmentalize the Covid, I think. And I just did what I knew I needed to do as a teacher for the kids. And I feel like I did a way better job of that when she wasn't there, which I mean, maybe that's because also it's different having someone, like, watch you teach.
7. When looking back on your co-teaching experience this semester, what recurrent concerns did you find yourself thinking regularly about or worrying about with regard to the co-teaching experience?
- I think the kids had a great year, I think. And she said this several times that they were lucky that they had two of us this year because there was such lack of contact with like, we didn't have parent volunteers, you know, it was just the teacher and the students, really. We had one child who came in the second day of school when we were in person, who was a handful. He had a lot of trauma, and he was a lot. But with the two of us, we could tag team with him and give the kids, give everyone what they needed, him included. And without two of us, times when eventually I would set on my own and didn't have a seven in the classroom in those days when she wasn't there, and it was me with all the students, it was a lot more difficult. But she needed a lot of attention. And so both of the same thing when I was absent, she would say, oh, my goodness, it's such a relief to have two people in the classroom, which I suppose any year it would be more of a relief to have that when you have someone who really, really needs I mean, really needed one on one attention.
 - But I think we did a great job. We really did a good job of working together, tag teaming with this with this little guy and seeing when one would get frustrated and no one, we need to jump in. And so you go teach everyone else that I'm going to work with him. She had some practices where we do daily five the kiddos would pick their own things to work out for literacy. So we did it with math, too. But it was called something else, but gave us the chance to work one on one with children. And I loved it. And it's something I really want to carry on into my classroom.
8. Would you please describe what situations made the experience successful and why?
- MT4 just had some wonderful social emotional techniques they really liked. I think the biggest thing that I am concerned about going forward is lesson planning. We're in kindergarten, which there is less. It's not as strict of a plan, I suppose. But she didn't plan at all. And even when I would plan, she didn't really help me with planning. And I took UB understand. And you did some of the backward planning and stuff. But basically I did full out lesson plans when I had to turn them in because it was just very nonchalant about it that that you don't need you really didn't need lesson plans for this. You know, you had a basic idea of what you were doing. And so I think if I get a job in kindergarten, I'm set because I have a lot of experience in kindergarten. I did my practical and my student teaching, and I was a teacher's aid in kindergarten for a few years. But say I get hired to teach grade definitely going to need a lot more lesson planning. And that's not something. I mean, I didn't do it at all in my student teaching, but in hindsight, I should have pushed more for that that I felt that lacking.
9. What detracted from the success? Why?
- Lack of freedom
 - Lack of flexibility

- | | |
|--|--|
| 10. What are the other experiences or situations which you may not have already mentioned which most contributed to the success? Which ones rise to the top in your mind? Why? | None |
| 11. Do you feel like you understand the TAT results for yourself and have a good understanding of what we mean when we talk about Achievement, Affiliation and Power motives explained in your TAT results? (If Answer is no, discuss and inform) | Yes |
| 12. As you think about the recurrent concerns or worries you had during the semester, would you please tell me about the concerns related to Achievement? How about concerns related to your relationships? What about recurrent concerns related to controlling or influencing? Why do you think these concerns were present during the co-teaching experience? | <ul style="list-style-type: none"> • Yeah. I hate to blame everything on the pandemic, but I feel like if I wasn't worried about keeping that continuity more for the kids that I would have done that more throughout my student teaching just showed more. And she did say followed her lead, but I put my own twist on things, but I think I put more of a twist on it when I was alone in the classroom. So. Okay. I loved when I subbed and was alone. I mean, I loved when I sub period. I really like having my own classroom, which I guess is part of that, too. That's influence. I had more influence. • So maybe being high in power wasn't so surprising; kind of in hindsight. |
| 13. As you think about the most important experiences we just discussed, do any of them stand out to you as being rooted in the Achievement, Affiliation, or Power Motives? Why? | |
| 14. Let's take each concern/worry and important experiences you identified one at a time (then review the success factors identified and discuss relatedness to the nAch, nAff, and nPow). | <ul style="list-style-type: none"> • I guess, as achievement just because I am looking forward to getting hired, that sometimes the vice principal or the principal would come in the classroom. And some of the times I wished I was teaching I wished it was the day when I was the one in front of the students because I would love to get hired at that school. And they knew me as a sub. • But I do love relationships, and that was lacking. If I hadn't already known a lot of the staff, I would have never gotten to know them because we were really an island of our own. Yeah. Because of Covid. So I was glad I already had made relationships there before. But I think also when you're having a tough year, you lean on each other and you didn't get to lean on each other because you couldn't even be around each other. • So that may have been what personally, MT4 and I were really close. And maybe that's another reason. That the academic side, that I just let some things go because I don't know if I just didn't want to push her more. I wanted to keep. But we had a great relationship and I didn't want to rock the boat. And so I just followed her lead. I don't know. |

15. After looking through the relative strengths of your own motive pattern, do you think your motive pattern contributed to or impacted any of the success factors we discussed? Why? How about the recurrent concerns or worries you identified?
- Yes. Especially looking at the affiliation. Well, I think both all of it. When I look at how I really like to teach by myself, I was so excited when she text me in the morning and say, hey, I'm not feeling great. Can you handle the class today? I would be so thrilled. I'm like, if you need another day, take it. Right. So I really did want that I wanted that influence. Yet I didn't push enough, probably to do it on my own when she was in the classroom.
 - And I think probably because I wanted to keep that relationship smooth between her and now you're really making me think back on it now so that I am going off topic here. Please feel free to I haven't gotten a letter of recommendation from her yet, which I asked for, and she said yes. And I know she would. When we talk to my CSU many University coach, she raved about how I was doing. And I really think she felt I was doing a great job.
 - And I think that was just part of the languishing, too, that she's just holding herself as much as she could do. And so I never got a letter of recommendation. And now I'm wondering if I should push back and ask for one at this point now that she's not teaching. Sorry. I'm just kind of thinking out loud, and she knows I'll be a great teacher. Right. But I would love a little more contribution, I guess, from her in that realm. I have not gotten a job yet, so I could use some help with that.
 - Yeah, I know she's not working this summer, so I feel like I could say, hey, I really could use that letter of recommendation from someone who worked with me all semester.
16. Let's take each success factor you identified one at a time (then review the success factors identified and discuss relatedness to the their nAch, nAff, and nPow results from the TAT.
17. Tell me about the pandemic and how it impacted your co-teaching experience this semester.
- Same
- No opportunities for having more relationships.
 - Also fatigue, if for lack of better word, a languishing?
 - I am a very huggy person, and, you know, I was with kindergarteners, so they want to hug you all the time. And at first we were a little reticent. You know, we were told not to touch the students. We were told to keep your distance, but I typically want to follow what administration has set forth. But that was one I had a really hard time with because these his children needed it. I think, more than ever, they needed hugs. And so when they came to us, we would hug them right back.
 - Yeah. And, you know, the masks were difficult. I think that students did better with masks than the teachers did. Just because, you know, in kindergarten, when they are learning phonemic awareness, they need to see what your mouth is doing, making these sounds, and you need to see that they are doing it. Masks really had a negative effect on that. I.
 -

18. How much of the co-teaching was done using remote learning?
19. Would you say the remote learning made the co-teaching experience more successful or less successful? Why?
20. Given what you have learned about the motive pattern of yourself and given the global pandemic, tell me how your dominate motive may have helped or challenged the co-teaching experience?
21. How about the least dominate motive? (same question).
22. Let's talk about the situations you mentioned earlier which made the co-teaching experience successful. How did the pandemic impact those success factors?
- First two weeks
- Co-teaching made it more successful. I mean, I think the co teaching went well on a remote platform. I think it would have been very difficult to not have a co teacher in that instance with 17 kindergarteners, because one would teach while the other still manage behaviors and managed someone's hands up, you know, looking at all the students seeing if they're engaged, giving kudos to those who are engaged, and in seeing the other ones to remain engaged, I think it really helps to have a co teacher in that instance.
- I think we had a lot in common when it came to the kinds of influences we wanted to show the children. And I think, personally, she didn't always have it in her to influence them that way, which I feel horrible saying. But I really feel she was languishing and just not all there for the students. And, I mean, here I feel like I'm patting myself on the back, but I think it was good the students had both of us because I was in a more positive place at the time.
 - And so I think we balance each other out while she has way more breadth of knowledge with academics and everything else. I mean, well, she's taught for what was it, twelve years, but I think I was just coming. I was fresh out of just learning everything that I had this last year and just came in eager to do everything I could. And she was just like, oh, my God. I've been here since last March doing half online, meet every meeting online. I kind of had it.
 - And so, like, my fresh face and I just think we balance each other out well. And the fact that we had I mean, it might have been if we didn't have the relationship we did, it could have been, like, let me step back. And I think if MT4 and I hadn't had the relationship, we did, I could have driven her a little crazy when she was languishing. And I was like, let's do this. So I toned myself down a little, and I think she brought herself up a little bit to meet me. So I think that affiliation was really important for our influence with the children.
- Okay. So the achievement one. Okay. Well, now that I think back, look back. I think it's maybe I didn't push for more that I thought I should have been getting sometimes, like, for example, the letter recommendation that I brought up, is it maybe daily. There were probably things that I thought I could have used more of, but I just let it slide. And because of the affiliation and I thought I'll just get that stuff will come eventually. I mean, I know I have the classroom management skills and the relationship skills and just a lot of background in the classroom. And that some of those things that maybe I didn't think I was getting.
- I think one thing enhanced is the use of technology. There's something we do we use called Hagerty for literacy, and it's a whole series of its very specific, explicit instructions, and the kids really do need to see your face. And so one of the other teachers had a great idea that I used that she video herself doing it. And then the students can see her on this big screen and see what her mouth was doing, which would help them with their phonemic awareness of it. And then when she showed the video, she could cruise the room.
 - And really, even though the kids had masks on, still try to hear what they were saying, what they were getting out of it. And I loved so I borrowed her idea. I love this idea. And I think even in future years, it would be a great thing to do, which I really feel like that only came about because of the pandemic, because otherwise they're seeing it. So that's a very specific thing. But I think in other ways, also building relationships. We did some ahead of time.

- | | |
|---|--|
| 23. Which success factors were strengthened by the pandemic and which were challenged or threatened by the pandemic? Why? | We had them do things on flip grid and seesaw, which are platforms for remote learning, where you just tell the student, find something in your house, and I bring it to us and make a little video and let us know why this describes you or your family. So I think the use of technology, actually, before you are in the classroom together to build relationships was a positive. And I actually did my master's thesis on it. And I did not think that I hypothesized that you weren't going to be able to build relationships with kindergarteners in online platform. And I was pleasantly surprised that we really did do that. So I'd say those are things that you wouldn't have done, except for the Pandemic is building relationships online. And then the specific using some of this technology ahead of time, videoing yourself so that then you could be there watching the children and helping. So it's almost like you're your own age. |
| 24. Is there anything you would like to mention that I did not ask you about or that we did not already discuss? | No |
| 25. We so much appreciate your help and participation on this research. Thank you! | Thank you. |
-

APPENDIX F: IRB APPROVAL DOCUMENT



**COLORADO STATE
UNIVERSITY**

The protocol listed below has been approved by the CSU IRB Determinations Fort Collins on Wednesday, May 5th 2021.

PI: Sebald, Ann

Submission Type and ID: Initial 1764

Title: MOTIVES AND SUCCESS FACTORS IN CO-TEACHING RELATIONSHIPS: A QUALITATIVE CASE STUDY

Approval Date: Wednesday, May 5th 2021

Continuing Review Date: no date provided

Expiration Date: Saturday, May 4th 2024

The CSU IRB (FWA0000647) has completed its review of protocol 1764 MOTIVES AND SUCCESS FACTORS IN CO-TEACHING RELATIONSHIPS: A QUALITATIVE CASE STUDY. In accordance with federal and state requirements, and policies established by the CSU IRB, the committee has approved this protocol under Exempt review.

Any additional comments regarding this approval are included below. If you have additional questions about this please contact RICRO IRB Staff.

Please note:

- This protocol will need to undergo Continuing Review and approval prior to no date provided.
- Any additional changes to this approved protocol must be obtained prior to implementation of those changes, by submitting an amendment request to the CSU IRB for review/approval.

Good luck in your research endeavors!

Initial review has been completed on 5/5/2021. Approval has been granted to recruit adults with the approved recruitment and consent procedures. Review was conducted under expedited review categories 6 & 7. Continuing review is not required in accordance with 45 CFR 46.109(f)(1)(i). The study was assessed as being in accordance with 45 CFR 46.111. This study is not funded.

Attachments

Interview/Focus Group Questions	Interview Questions (Revised 4-30-21).pdf	Interview Questions (Revised 4-30-21)
Methodology Section	Dissertation - Methodology Section (Revised 4-30-21).pdf	Methodology Section
Consent	MT IRB consent form 5-5-21.pdf	Mentor Teacher Consent Form (Revised 5-5-21)
Consent	TC IRB consent form 5-5-21.pdf	Teacher Candidate Consent Form (Revised 5-5-21)
Recruitment Materials	MT Recruitment Email 4-30-21.pdf	Mentor Teacher Recruitment Email - Revised 4-30-21
Recruitment Materials	TC Recruitment Email 4-30-21.pdf	Teacher Candidate Recruitment Email - Revised 4-30-21

APPENDIX G: MENTOR TEACHER RECRUITMENT LETTER

FirstName,

Thank you for engaging in co-teaching during student teaching. We would like to invite you to participate in our follow up study, examining the success factors of the co-teaching experience at this location. By participating you will be helping us make improvements to student teaching, and you will also receive an informative personalized report many people find very helpful to their personal and professional development.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this qualitative case study is to understand what factors contributed to the success of highly rated co-teaching experiences for mentor teachers (MTs) and teacher candidates (TCs) and to what extent those success factors are related to the measured achievement, affiliation and power motives of the MTs and the TCs. These motives are defined by and measured within the context of the acquired needs theory of motivation. The purpose also includes understanding these success factors within the context of the global Covid-19 pandemic. Understanding co-teaching during student teaching within the context of motivation and the pandemic will be helpful in making program improvements.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place during the regularly assigned student teaching semester and experiences, EDUC 687E. This study will be conducted in May, 2021. The Thematic Apperception Test (TAT) measuring the achievement, affiliation and power motives will be emailed to you in May. It is done online and will take no longer than 30 minutes to complete. Near the end of May a virtual interview will be conducted by Zoom or Microsoft Teams lasting no more than 30 minutes. This interview will involve questions related to factors which made your co-teaching experience this semester successful.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

You may not experience any direct benefits. You will receive a very useful informative report summarizing the results of your TAT in lay terms which many people find these reports quite helpful to their own personal and professional development. We hope to learn more about the pedagogical practice of co-teaching during student teaching particularly during the pandemic, and in doing so, help teacher educators better understand the impact of this practicum experience on teacher candidate learning, engagement, and reflective practices.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with CSU. **Participation (or lack thereof) will not impact your teacher candidate's grade in the course.**

WHAT IF I HAVE QUESTIONS?

For questions or concerns about the study or the consent form, you may contact **Kelley Hammel**

If you agree to participate, **please sign and return the attached consent form or email your approval.**

Dr. Ann Sebald & Kelley Hammel, Ph.D. Candidate



COLORADO STATE UNIVERSITY

APPENDIX H: TEACHER CANDIDATE RECRUITMENT LETTER

FirstName,

Thank you for engaging in co-teaching during student teaching. We would like to invite you to participate in our follow up study, examining the success factors of the co-teaching experience at this location. By participating, you will be helping us make improvements to student teaching, and you will also receive an informative personalized report many people find very helpful to their personal and professional development.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this qualitative case study is to understand what factors contributed to the success of highly rated co-teaching experiences for mentor teachers (MTs) and teacher candidates (TCs) and to what extent those success factors are related to the measured achievement, affiliation and power motives of the MTs and the TCs. These motives are defined by and measured within the context of the acquired needs theory of motivation. The purpose also includes understanding these success factors within the context of the global Covid-19 pandemic. Understanding co-teaching during student teaching within the context of motivation and the pandemic will be helpful in making program improvements.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place during the regularly assigned student teaching semester and experiences, EDUC 687E. This study will be conducted in May, 2021. The Thematic Apperception Test (TAT) measuring the achievement, affiliation and power motives will be emailed to you in May. It is done online and will take no longer than 30 minutes to complete. Near the end of May a virtual interview will be conducted by Zoom or Microsoft Teams lasting no more than 30 minutes. This interview will involve questions related to factors which made your co-teaching experience this semester successful.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

You may not experience any direct benefits. You will receive a very useful informative report summarizing the results of your TAT in lay terms which many people find these reports quite helpful to their own personal and professional development. We hope to learn more about the pedagogical practice of co-teaching during student teaching particularly during the pandemic, and in doing so, help teacher educators better understand the impact of this practicum experience on teacher candidate learning, engagement, and reflective practices.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with CSU. **Participation (or lack thereof) will not impact your grade in the course.**

WHAT IF I HAVE QUESTIONS?

For questions or concerns about the study or the consent form, you may contact **Kelley Hammel**

If you agree to participate, **please sign and return the attached consent form or email your approval.**

Dr. Ann Sebald & Kelley Hammel, Ph.D. Candidate



COLORADO STATE UNIVERSITY

APPENDIX I: MENTOR TEACHER CONSENT FORM



College of Health and Human Sciences
School of Education

209 Education Building • 1588 Campus Delivery • Fort Collins, Colorado 80523-1588
Phone: (970) 491-6317 • Fax: (970) 491-1317 • www.soe.chhs.colostate.edu

Mentor Teacher (MT) IRB Form

Formal Study Title: Motives and Success Factors in Co-teaching Relationships: A Qualitative Case Study

PRINCIPAL INVESTIGATOR: Kelley Hammel, Ph.D. Candidate

CO-INVESTIGATOR(S): Ann Sebald, Ed.D Assistant Professor, Co-Director

WHAT IF I HAVE QUESTIONS?

For questions or concerns about the study, you may contact **Kelley Hammel**

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the CSU Institutional Review Board at: RICRO_IRB@mail.colostate.edu; 970-491-1553.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this qualitative case study is to understand what factors contributed to the success of highly rated co-teaching experiences for mentor teachers (MTs) and teacher candidates (TCs) and to what extent those success factors are related to the measured achievement, affiliation and power motives of the MTs and the TCs. These motives are defined by and measured within the context of the acquired needs theory of motivation. The purpose also includes understanding these success factors within the context of the global Covid-19 pandemic. Understanding co-teaching during student teaching within the context of motivation and the pandemic will be helpful in making program improvements.

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being asked to participate in the study because you fit these criteria: as a mentor teacher supporting M.Ed. + Teacher Licensure students at Colorado State University, you are being asked to be a part of this study to examine co-teaching during student teaching.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place during the regularly assigned student teaching semester and experiences, EDUC 687E. This study will be conducted in May, 2021. The Thematic Apperception Test (TAT) measuring the achievement, affiliation and power motives will be emailed to you in May. It is done online and will take no longer than 30 minutes to complete. Near the end of May a virtual interview will be conducted by Zoom or Microsoft Teams lasting no more than 30 minutes. This interview will involve questions related to factors which made your co-teaching experience this semester successful.

WHAT WILL I BE ASKED TO DO?

If you volunteer to participate in this study, you will be asked to do the following: You will not be asked to do anything outside of the regular expectations of co-teaching during student teaching. You will be asked to complete the TAT online which involves looking at 5-6 pictures and writing short stories (100-150 words – approx. 5 min each) summarizing what you think is happening in the pictures. You will be asked to participate in a 30 minute interview to discuss the TAT results and

ask questions which help to clarify the most important factors which made your co-teaching experience successful this semester.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

You may not experience any direct benefits. You will receive a very useful informative report summarizing the results of your TAT in lay terms which many people find these reports quite helpful to their own personal and professional development. We hope to learn more about the pedagogical practice of co-teaching during student teaching particularly during the pandemic, and in doing so, help teacher educators better understand the impact of this practicum experience on teacher candidate learning, engagement, and reflective practices.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

There are no known risks included with this study. While the level of risk is minimal, is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

WHO WILL SEE THE INFORMATION THAT I GIVE?

The data collected will not be shared with others. All information gathered in this study will be kept as confidential as possible. Your privacy is very important to us and the researchers will take every measure to protect it. Your information may be given out if required by law; however, the researchers will do their best to make sure that any information that is released will not identify you. No reference will be made in written or oral materials that could link you to this study. For this study, we will assign a code to your data so that the only place your name will appear in our records is on the consent and in our data spreadsheet which links you to your code. Only the research team will have access to the link between you, your code, and your data. We intend to record the interviews so they can be transcribed. Once TAT and interview data have been collected and analyzed, it will be stored in a password protected storage system for three years after completion of the study. After the storage time, the information gathered will be destroyed. You should know, however, that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court OR to tell authorities if we believe a child has been abused, or you pose a danger to yourself or someone else.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with CSU. **Participation (or lack thereof) will not impact your teacher candidate's grade in the course.** You are encouraged to ask questions about this study at the beginning or any time during the research study.

Participant Consent:

Your signature acknowledges that you have read the information stated and voluntarily wish to participate in this research. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing _2_ pages.

Do you consent to having the interview recorded (please circle one)? yes no

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant

Date

APPENDIX J: TEACHER CANDIDATE CONSENT FORM



College of Health and Human Sciences
School of Education

209 Education Building • 1588 Campus Delivery • Fort Collins, Colorado 80523-1588
Phone: (970) 491-6317 • Fax: (970) 491-1317 • www.soe.chhs.colostate.edu

Teacher Candidate (TC) IRB Form

Formal Study Title: Motives and Success Factors in Co-teaching Relationships: A Qualitative Case Study

PRINCIPAL INVESTIGATOR: Kelley Hammel, Ph.D. Candidate

CO-INVESTIGATOR(S): Ann Sebald, Ed.D Assistant Professor, Co-Director

WHAT IF I HAVE QUESTIONS?

For questions or concerns about the study, you may contact **Kelley Hammel**

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the CSU Institutional Review Board at:

RICRO_IRB@mail.colostate.edu; 970-491-1553.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this qualitative case study is to understand what factors contributed to the success of highly rated co-teaching experiences for mentor teachers (MTs) and teacher candidates (TCs) and to what extent those success factors are related to the measured achievement, affiliation and power motives of the MTs and the TCs. These motives are defined by and measured within the context of the acquired needs theory of motivation. The purpose also includes understanding these success factors within the context of the global Covid-19 pandemic. Understanding co-teaching during student teaching within the context of motivation and the pandemic will be helpful in making program improvements.

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being asked to participate in the study because you fit these criteria: as a M.Ed. + Teacher Licensure student at Colorado State University, you are being asked to be a part of this study to examine co-teaching during student teaching.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place during the regularly assigned student teaching semester and experiences, EDUC 687E. This study will be conducted in May, 2021. The Thematic Apperception Test (TAT) measuring the achievement, affiliation and power motives will be emailed to you in May. It is done online and will take no longer than 30 minutes to complete. Near the end May a virtual interview will be conducted by Zoom or Microsoft Teams lasting no more than 30 minutes. This interview will involve questions related to factors which made your co-teaching experience this semester successful.

WHAT WILL I BE ASKED TO DO?

If you volunteer to participate in this study, you will be asked to do the following: You will not be asked to do anything outside of the regular expectations of co-teaching during student teaching. You will be asked to complete the TAT online which involves looking at 5-6 pictures and writing short stories (100-150 words – approx. 5 min each), summarizing what you think is happening in the pictures. You will be asked to participate in a 30 minute interview to discuss the TAT results and

ask questions which help to clarify the most important factors which made your co-teaching experience successful this semester.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

You may not experience any direct benefits. You will receive a very useful informative report summarizing the results of your TAT in lay terms which many people find these reports quite helpful to their own personal and professional development. We hope to learn more about the pedagogical practice of co-teaching during student teaching particularly during the pandemic, and in doing so, help teacher educators better understand the impact of this practicum experience on teacher candidate learning, engagement, and reflective practices.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

There are no known risks included with this study. While the level of risk is minimal, it is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks. Known risk of potential breach of confidentiality with the data will be minimized. There is no known risk of discomfort responding to questions related to the co-teaching experience.

WHO WILL SEE THE INFORMATION THAT I GIVE?

The data collected will not be shared with others. All information gathered in this study will be kept as confidential as possible. Your privacy is very important to us and the researchers will take every measure to protect it. Your information may be given out if required by law; however, the researchers will do their best to make sure that any information that is released will not identify you. No reference will be made in written or oral materials that could link you to this study. For this study, we will assign a code to your data so that the only place your name will appear in our records is on the consent and in our data spreadsheet which links you to your code. Only the research team will have access to the link between you, your code, and your data. We intend to record the interviews so they can be transcribed. Once TAT and interview data have been collected and analyzed, it will be stored in a password protected storage system for three years after completion of the study. After the storage time, the information gathered will be destroyed. You should know, however, that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court OR to tell authorities if we believe a child has been abused, or you pose a danger to yourself or someone else.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with CSU. **Participation (or lack thereof) will not impact your grade in the course.** You are encouraged to ask questions about this study at the beginning or any time during the research study.

Participant Consent:

Your signature acknowledges that you have read the information stated and voluntarily wish to participate in this research. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 2 pages.

Do you consent to having the interview recorded (please circle one)? yes no

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant

Date