

JOHN JOSEPH CULLIGAN

What Are Middle School Students' Reasons for Choosing to Engage or
Not to Engage in Their Own Learning?

(Under the Direction of Dr. H. James McLaughlin)

The purpose of this qualitative study was to examine middle school student ideas about school life, their perceptions of their classroom cultures, their perceptions of their experiences at school, and their interactions with those around them in order to understand what qualities in their learning environment influence their motivation to learn. Four individual case studies and a cross-case analysis were conducted with four adolescent student participants from a suburban middle school in the Southeastern United States during the course of the 2001-2002 school year. The data sources were analyzed in order to find commonalities and differences in the perceptual experiences of the participating middle school students as they navigated the eighth grade. Throughout the study, student perceptions were articulated and analyzed using a multidimensional theoretical framework that is introduced in Chapter Three. Findings indicate that student perceptions of a welcoming classroom culture along with a strong relationship with teachers are prerequisites for some students to be willing to engage in learning. The findings also indicate that teaching methods students perceive to be more active are more motivating than those perceived as more passive in nature.

INDEX WORDS: Case study, Qualitative research, Motivation, Student Motivation, Student engagement, Middle school, Perception, Student perception, Theoretical framework, Social constructivism, Classroom culture, Student needs, Locus of control, Student interest, Student boredom, Relevance, Active learning, Passive learning, Adolescent student.

WHAT ARE MIDDLE SCHOOL STUDENTS' REASONS FOR
CHOOSING TO ENGAGE OR NOT TO ENGAGE IN THEIR OWN LEARNING?

by

JOHN JOSEPH CULLIGAN

B.A., Stetson University, 1987

M.S., Nova Southeastern University, 1995

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2002

© 2002

John Joseph Culligan

All Rights Reserved

WHAT ARE MIDDLE SCHOOL STUDENTS' REASONS FOR
CHOOSING TO ENGAGE OR NOT TO ENGAGE IN THEIR OWN LEARNING?

by

JOHN JOSEPH CULLIGAN

Approved:

Major Professor: H. James McLaughlin

Committee: Kathleen DeMarrais
Denise Glynn
Penny Oldfather
Elizabeth Pate

Electronic Version Approved:

Gordhan L. Patel
Dean of the Graduate School
University of Georgia
April 2002

DEDICATION

This dissertation is dedicated to my wife, Terri Culligan. It was only through your eyes that I have been able to really see myself and to imagine the possibilities. Without your unwavering belief in my abilities, I would have never even dreamed that I was capable of such an accomplishment.

ACKNOWLEDGMENTS

Thank you to each member of my committee for all of your time and expertise. I would like to thank Dr. Denise Glynn for the strength of your insight into the middle school student, Dr. Kathleen deMarrais for making theory and qualitative research accessible and understandable, and Dr. Penny Oldfather for helping me tear down the walls of traditional thought, paving the way for authentic thought and true learning. Thanks to Dr. Elizabeth Pate for your encouragement and support during the past two years. Your constant reminders to place my family first helped to keep me grounded during the crazy times. To my major professor, Dr. Jim McLaughlin, thank you for all of your encouragement, support, and expert guidance throughout the entire process.

I would like to thank Terri Culligan for the never-ending proofreading, editing, and idea generation, and Dr. David Whitney for reliable peer/colleague examination during data analysis. Thank you to my colleagues for allowing me access to your classrooms, especially Dottie Bouldin, Martha Brick, Michael Cheatham, Janet Faulkner, Sally Newberry, and Sherry Wooten. Thanks to Janet Faulkner, Nannette Parrish, Paul Brooksher, Rob Anderson, and Judy Deroche for help with classroom coverage.

I would also like to recognize my parents, Tom and Diane Culligan for emphasizing the importance of education during my formative years. You planted and patiently cultivated the seeds that have only recently blossomed. And finally, thank you to Tommy and Nicholas for being such great kids and always pretending to be interested in your Dad's boring schoolwork.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.....	v
CHAPTER	
I INTRODUCTION.....	1
Statement of the Problem.....	3
Research Question.....	11
II LITERATURE REVIEW.....	12
Introduction.....	12
Historical Review.....	15
My Conceptual Framework.....	26
Summary.....	42
III METHODOLOGY.....	45
Research Design.....	47
Description of School Context/Site Selection.....	48
Classroom Context.....	49
Participant Selection.....	53
Data Sources and Collection.....	56
Data Analysis.....	61
Ethical Concerns.....	68
Researcher Role.....	70

	Researcher Bias.....	71
	Validity, Reliability, and Limitations.....	73
	Conclusion.....	75
IV	JENNY.....	78
	Introduction.....	78
	Classroom Climate.....	82
	Perceived Student Needs.....	89
	Locus of Control-Student Efficacy.....	97
	Relevance-Content Value.....	107
	Student Interest vs. Disinterest.....	113
	Conclusion.....	121
V	MISSY.....	125
	Introduction.....	125
	Classroom Climate.....	126
	Perceived Student Needs.....	135
	Locus of Control-Student Efficacy.....	142
	Relevance-Content Value.....	144
	Student Interest vs. Disinterest.....	148
	Conclusion.....	161
VI	BOB.....	164
	Introduction.....	164
	Classroom Climate.....	166
	Perceived Student Needs.....	174

	Locus of Control-Student Efficacy.....	183
	Relevance-Content Value.....	188
	Student Interest vs. Disinterest.....	194
	Conclusion.....	207
VII	GREG.....	210
	Introduction.....	210
	Classroom Climate.....	213
	Perceived Student Needs.....	218
	Locus of Control-Student Efficacy.....	222
	Relevance-Content Value.....	228
	Student Interest vs. Disinterest.....	235
	Conclusion.....	248
VIII	A CROSS-CASE ANALYSIS.....	251
	Introduction.....	251
	Student Orientations to Achievement.....	251
	Classroom Climate.....	252
	Perceived Student Needs.....	258
	Locus of Control-Student Efficacy.....	268
	Relevance-Content Value.....	274
	Student Interest vs. Disinterest.....	280
	Chapter Summary	297
IX	CONCLUSIONS AND IMPLICATIONS.....	299
	Introduction.....	299

Answer to Research Question.....	299
My Current Views of Motivation as a Result of this Study.....	312
Suggestions for Future Research.....	315
Implications for Middle School Teachers: So What?.....	316
Teaching Methods.....	318
Summary.....	322
REFERENCES.....	324
APPENDICES	
A BROKEN ARROW MIDDLE SCHOOL COVENANT.....	338
B INTERVIEW PROTOCOL #1	
OVERVIEW OF STUDENT’S MOTIVATION TO ENGAGE	
IN LEARNING ACTIVITIES	340
C QUESTION BANK.....	342
D GROUP INTERVIEW PROTOCOL.....	345

CHAPTER I

INTRODUCTION

In educating the young we use pleasure and pain as rudders to steer the course.

Aristotle in 322 BC (in Bartlett, 1980)

Interest in motivating students is long standing and widespread. Philosophers, psychiatrists, and teachers have pondered the concept for thousands of years. In schools today, discussion in teacher lounges often centers on specific students who don't pay attention in class or those who refuse to complete assignments—regardless of ability level. Students who suffer from a lack of motivation are usually lumped together and labeled lazy. Many teachers will admit to being perplexed and frustrated by the problem, and a number of them are seeking ideas to offset it. Perusing the brochure for the 2001 National Middle School Association Conference in St. Louis, the vast majority of sessions were related to this issue, and a standing-room-only crowd was on hand for my presentation on motivational lesson plans during the 2000 conference in Orlando.

Teachers are certainly not the only ones concerned with student motivation, however. Most parent-teacher conferences attempt to identify strategies for dealing with low-achieving students and often center on questions such as, "How can we get Johnny to do his class work? How can we get Jenny to do her homework? How can we get Barbara to study?" Parents are typically distraught and confused, and are often looking for the magic answer to their child's problems. They often report that their low-achieving child had been on the honor roll until the mystical adolescent transformation. Not surprising to

the teachers and parents alike, research indicates that early adolescent years often mark a decline in motivation for students (e.g. Eccles, Wigfield, Midgley, Reuman, Mac Iver, & Feldlaufer, 1993; Midgley, 1993; Oldfather & McLaughlin, 1993). Historically, research on motivation is rich, varied, and in many cases, controversial.

What exactly is motivation? Researchers' definitions range from simple, straightforward assessments to more complex interpretations. Eggen and Kauchak (1994) describe it as a force that energizes and directs behavior toward a goal. Motivation is defined by Keller, Kelly, and Dodge (1978) as a term to refer to all of the affective components of personality and environment that influence effort, as opposed to ability. In educational terms, Brophy (1982) defines "motivation to learn" as the tendency to approach tasks with serious intent to do them carefully and get the benefit from them, and not merely to complete them. Dweck (1989) defines "achievement motivation" as striving toward a particular goal. She further identifies two subclasses of achievement goals: (a) learning goals, in which individuals strive to increase their competence, to understand or master something new, and (b) performance goals, in which individuals strive either to document, or gain favorable judgments of, their competence or to avoid negative judgments of their competence. Oldfather (1992) characterizes the constructivist view of motivation as the continuing impulse to learn (CIL). She describes it as:

an on-going engagement in learning that is propelled and focused by thought and feeling emerging from the learners' processes of constructing meaning. CIL is characterized by intense involvement, curiosity, and a search for understanding, as learners experience learning as a deeply personal and continuing agenda. (p. 8)

An individual's perceptions of the task and his or her intent as he or she decides on how (or even whether or not) to pursue the task are central to each definition of motivation. The nebulous "why?" a person might or might not choose to begin, perform, and complete a task is incorporated within each of them. That is the crux of the mystery surrounding the concept of motivation

Statement of the Problem

Student motivation is an issue of great concern in schools. Lack of student motivation can be one of the most frustrating aspects of teaching. In spite of that, teachers become overwhelmed with meetings, paperwork, and pressure to cover vast amounts of subject matter, so time to concentrate on motivational strategies is often limited. Relying upon intuition stemming from an implicit paradigm that has not been thoroughly considered, a well-intentioned teacher may indiscriminately try a number of motivational strategies. If the teacher is fortunate, she may find a diamond in the rough amongst the many futile or possibly even harmful motivational strategies.

Searching for a way to motivate students, a teacher may rely upon threats of failure and subsequent grade retention. At other times, the teacher might advise parents to reward students for acceptable performance while punishing students for performance below expectations. The teacher might also try to bribe students with candy. Alternatively, the teacher might attempt to motivate his students by forming positive relationships with them or creating interesting and unique lessons. The vast majority of teachers have likely tried most of these strategies amid countless others, finding that a strategy that succeeds with one student (or group of students) may fail later with a different student (or group of students).

Personally, I am very interested in student motivation. As a student, I sat bored in class after class through much of high school and my undergraduate days at college. During this time, I craved any type of mental stimulation. Many of my teachers were seemingly driven not by a desire to interest students in the subject, but by the need to “get through the material.” I was the type of student that would work extremely hard when I perceived an assignment as valuable or important. On the other hand, I would often rebel by putting forth minimal effort when an assignment seemed like busy-work. My parents pushed me hard to achieve, but I had my own ideas. I was not a terrible student, but I could have done much better. When something is meaningful to me, I put my heart and soul into it. When I choose to do something, I do it well. I still complete meaningless administrative paperwork with minimal effort, while achieving those tasks I deem important with energy and enthusiasm.

As a teacher, it has always been my goal to interest students in furthering their own education. I discovered early on (as I watched other teachers) that most students (but not all) could be pounded into submission. That has never been my goal. I am interested in helping students discover the meaning behind the “academic knowledge and skills.” I attempt to do this by exhibiting an energetic and enthusiastic attitude while using interesting and meaningful teaching strategies.

A few years ago while working in a pseudo-administrative position, I spent a good portion of my days observing other teacher’s classes. Although I had been in classrooms as a student throughout my life, this was the first time I examined teachers as an “authority.” I noticed that there were distinct attitudinal and behavioral patterns within each class. In one teacher’s social studies classes, students were enthusiastic and engaged

in activities on a regular basis. In another teacher's social studies classes, students seemed bored and disengaged. Though both teachers were teaching heterogeneously grouped students at the same school under the same system-wide guidelines (e.g. academic standards, grades, promotion requirements), students in the first teacher's class were more interested in advancing their own learning than the students in the second class. My job was to help teachers improve their students' achievement levels. It was not as easy as I originally thought it would be. I found that helping teachers improve their students academic achievement was more complicated than simply suggesting new teaching strategies and lesson plans. Improving student attitudes was the first step. In most cases, it included the need for a shift in a teacher's paradigm.

Throughout my career, infrequent but snide comments by some of my colleagues have occasionally caused me to question my strategies. My classes are often louder than others, I have very little need for administrative disciplinary measures, and my students generally make good grades. I remain assured, though, that my students work hard and learn in my class. The following passage is from an email that I received during the spring of 2000 from one of my students:

I just wanted to thank you for making SS so interesting this year. Last year my teacher made us take notes out of the book and answer questions all day every day, and I don't remember a thing! But in this class, I remember every little detail from every class because you make it so interesting. I feel like a sponge. (Now only if math were like that...) :) . I just wanted to let you know, and to tell you to keep up

the great work. I have to go watch WWTBAM (Who Wants to Be a Millionaire).

your student,

Sandra

P.S: can you teack me to spell? J/K. (Just Kidding)

A number of students return to visit me on a regular basis with specific feedback on which aspects of my class prepared them for their high school social studies classes. In addition to my own experiences as a student, feedback like this motivates me to discount negative opinions from people who have never even been in my class while I am teaching. Even so, I believe that some of my colleagues on the faculty perceive me as a teacher who does not make his class difficult enough.

Based upon my experiences as a student, teacher, parent, and teacher evaluator, I have become quietly critical of teachers who overuse textbooks, worksheets, lecturing, and other traditional teaching strategies. Although each of these strategies has its own legitimate place in most curriculums, excessive use can make a class seem tired and boring. Teachers who do this tend to rely heavily upon extrinsic motivators like grades, threats of parental valuation, and possible student retention. Often, these are the people who lament the passing of the “golden days” when kids were more respectful and better behaved. Strange enough, these are also the teachers who tend to share the most colorful stories in the teacher’s lounge recounting outrageous student misbehavior.

My background and continually evolving subjectivity clearly influence my present attitude toward teaching and student motivation. Consequently, they had some influence in the way I interpreted my research data. For the past four years, I have been

developing a conceptual framework through which I can view student motivation. As I learn more and continue to develop professionally, I adjust my views and transform the framework to fit my new insights.

For a pilot study leading up to this dissertation (Culligan, 2000), I interviewed and observed an eighth grade boy over a period of two years. During the 1999-2000 school year, Mark was my social studies student. The bulk of my data were collected during this time period. After failing math and science, Mark was retained for the 2000-2001 school year. Though Mark was not on my academic team during his second eighth-grade year, we maintained our relationship by meeting weekly for informal breakfast and conversation. During this time, I acted as his mentor.

In spite of his teachers' best efforts, Mark would go weeks at a time without turning in assignments in some of his classes. On the contrary, though, he sometimes chose to engage in full force. An anomaly of sorts, Mark is a typical adolescent. During the times when he chose to engage in his own learning, he learned very well and achieved at an above average level. To his bewildered and frustrated teachers, understanding Mark's hot and cold behaviors seemed to be an unsolvable mystery. What were Mark's reasons for engaging in some activities while completely ignoring others?

Mark's attitudes toward his subjects were quite complicated. At one point, he told me that his favorite subject during the seventh grade year was science. Later, he discussed his dislike for his eighth grade science class. Though Mark's attitude toward eighth grade science was quite different from his attitude toward seventh grade science, it was not difficult to figure out why. His seventh grade science teacher used more hands-on activities than his eighth grade teacher. When asked about his seventh grade science

class, Mark's demeanor was more animated, especially when he talked about dissection of animals. Throughout the study, Mark attributed his positive attitude and passing grades in seventh grade science to the teacher and her teaching strategies. During one interview, Mark told me that he was (at the time) trying harder in his eighth grade science class due to his mother's threat of punishment. The reality was, however, that his effort and grades had remained consistently poor in this academic subject throughout the year.

For Mark, a positive classroom climate was important, serving as a background for other types of motivation. A negative classroom climate dictated by the teacher (as perceived by him) precluded other types of motivation. Without a positive classroom climate, Mark was almost completely turned off in a class. The perceived relationship with the teacher was the cornerstone of Mark's perception of the classroom climate. Though his eighth grade science teacher was very concerned for Mark's welfare, Mark perceived differently. He perceived the teacher's serious demeanor as a mean and uncaring attitude.

As important as classroom climate was to Mark's motivation, I concluded that this alone would not govern his success or failure. It simply served as the backdrop to complement other possible types of intrinsic motivation. Mark went to the same teacher for math and language arts classes. Though the climate was similar in each class, other issues influenced his motivation. Since Mark had been struggling with math for years, he perceived that learning the subject was out of his control. His reaction to this external locus of control was to quit trying. Mark felt that he was unable to understand mathematical concepts, and therefore he put forth little or no effort. In the end, math was the main reason for Mark's retention in the eighth grade.

Compared with his science and math classes, Mark enjoyed success in social studies and language arts. Overall, Mark said that he was highly motivated to engage in activities that allowed him to get physically and/or emotionally involved, regardless of which class. His social studies and language arts classes provided these opportunities more often than did math and science. Mark's comments showed some evidence that hands-on-projects made him feel a sense of self-efficacy as well. Other activities that Mark found engaging were those that involved group work. Mark revealed a tendency towards social constructivism. He described how it was easier for him to understand and make sense of the material when he was able to talk it over with others in the class. Mark described bookwork and other types of individual seatwork as his least favorite activities. In addition, shallow perceptions of the real-life usage for his academic content areas may have had grave implications on his motivational level at school. The only subjects he did well in were those that he simply enjoyed on a more regular basis.

Mark was a student who had the ability to learn at high levels, but often chose not to engage in his own learning. Probing interviews, triangulated with observations and archival data, helped me to understand more about why Mark chose to engage in some activities while not choosing to engage in others. There are students like Mark in just about every classroom in America. On a lesser scale, average and high achieving students choose to put forth more effort on some assignments (or in some classes) than others. What are their reasons for choosing to do this?

My school's covenant (see Appendix A) is similar to most school mission statements. The belief that underlies most of the declarations in the document states "all children can learn." Though each student may master content to varying degrees at each

developmental level, everybody can learn. The key word in the sentence above is “can.” In one classroom, a student might be engaged and learning regularly, whereas in another classroom, the child might avoid or refuse to engage in an activity. The difference between choosing to engage and choosing not to engage in learning is the motivation of the participant. While behavior is almost always motivated, it is also almost always biologically, culturally, and situationally determined as well (Maslow, 1943). The popular phrase, “You can lead a horse to water, but you can’t make him drink” (John Heywood as quoted in Bartlett, 1980) was coined more than 400 years ago. Tried and true, it still applies in classrooms throughout the United States today.

Oldfather (1991) conducted a qualitative longitudinal research study on motivation that highlighted student perceptions. The centrality of the concept of perception in her research question, “What are students’ perceptions of their own reasons/purposes for being or not being involved in learning activities?” and her methodology had profound influence on the development of my own study. A student’s perception of his or her own experiences is the reality in which he or she lives (Williamson, 1996). Consequently, hearing what qualities of their learning experience middle school students perceive to be motivating should provide adults with a window into the adolescent world. The purpose of my study was to examine student ideas about school life, their perceptions of their classroom climates, their perceptions of their experiences at school, and their interactions with those around them in order to understand what qualities in their learning environment influence their motivation to learn. These perceptions are important because of the influence they may have on the students’ motivation to engage in learning and academic achievement.

My research is intended to enrich the body of research in the continuing inquiry in school related motivation. The collection and analysis of the perception-laden data was guided by a conceptual framework that will be introduced later in the literature review. This framework served as an overarching structure to organize the ideas and concepts described by the plethora of related theories and research studies, and was used as a means to help guide my data collection and coordinate my analysis.

Since my study illustrated in-depth and meaningful data that were derived from the students' perceptions, my primary concern was to identify school conditions that promote or discourage student motivation. With this goal in mind, I did not exclude any element my participants perceived as influential to their motivation. If my analysis had revealed important data that could not be readily organized within my framework, I was ready to adjust the framework accordingly. I will build upon the qualitative works of Oldfather (1991, 1992, 1993) and others by focusing upon both positive and negative aspects of school that influence student motivation to engage in their own learning. In addition, my focus upon student perceptions through the lens of this conceptual framework incorporates first-person insight that can help academic researchers and classroom teachers to think about the idea and practice of motivation.

Research Question

- What are middle school students' reasons for choosing to engage or not to engage in their own learning in school?

CHAPTER II

LITERATURE REVIEW

Introduction

As a complicated process involving intellectual, perceptual, emotional, and socio-cultural aspects to varying degrees, motivation is a difficult concept to understand. Attempting to understand complex issues such as perception and motivation, a person is not likely to be able to understand goal-oriented behavior in achievement situations without recourse to theories about invisible processes that include cognition. Graham and Weiner (1989) define “theory” as a network of constructs that are related to one another by a precise set of rules, with some or all of these constructs linked by the use of relevant, clear, and consistent terminology. The objective of motivational theory is to develop a language, an explanatory system, a conceptual representation, or what is more commonly termed a theory, that is applicable across many domains of behavior and provides insights about why behavior is initiated, maintained, and directed.

There are two prominent, often polarized positions researchers adopt in relation to “why” certain behaviors are initiated. They are extrinsic and intrinsic motivation. Extrinsic motivation is based upon the belief that positive reinforcers as consequences of behavior increase the probability of a behavior, whereas negative reinforcers decrease the probability of a behavior. Extrinsic motivation has been studied and defended by behaviorists throughout the 20th Century (Cameron & Pierce, 1994, 1996; Hull, 1934; and Skinner, 1950). Deci (1975) describes intrinsic motivation as learning and mastery that

are being sought for their own sake. This definition does not address the learners' purposes, and may be slightly misleading. Other researchers have explored the influence of various intrinsic motivators such as needs (Glasser, 1986), search for competence (Dweck, 1989), curiosity and a search for understanding (Oldfather, 1992), student choice (Pate, Homestead and McGinnis, 1997), and student interest (Hootstein, 1994).

Although there is some recent literature that supports extrinsic motivation to enhance learning (Cameron and Pierce, 1994, 1996), there is an ongoing debate among current researchers concerning the effectiveness of extrinsic rewards. In fact, much of the literature focuses on debunking rewards as motivators. Kohn (1997) claims that advocates of extrinsic rewards endorse a view of education that is unpleasant and a curriculum that is unappealing. Many researchers claim either that extrinsic rewards are unnecessary (Horn, 1991; Schaps & Lewis, 1991), ineffective (Kohn, 1994), or that they undermine intrinsic motivation (Deci & Ryan, 1987; Kohn, 1993a, 1993b, 1996; Lepper, Keavney, & Drake, 1996; Ryan & Deci, 1996). Dozens of studies were cited by Kohn (1993a) to show that people expecting to receive a reward for completing a task simply did not perform as well as those who expected nothing tangible. The offer of rewards can elicit temporary compliance in many cases, but are ineffective in helping children to become caring, responsible people or lifelong, self-directed learners (Fantuzzo, Rohrbeck, Hightower, & Work, 1991).

Some behaviorists claim that extrinsic rewards do not undermine intrinsic motivation. Cameron and Pierce (1994) conducted a meta-analysis using 20 years of research concerning the effects of extrinsic motivators (rewards) on intrinsic motivation. They analyzed the results of nearly 100 research studies and concluded that, overall,

extrinsic rewards do not undermine intrinsic motivation. The results of the meta-analysis indicated that rewards may be used effectively to enhance or maintain an individual's intrinsic interest in activities. Ryan and Deci (1996), Lepper et al. (1996), and Kohn (1996) claimed that the meta-analysis was: (a) biased, (b) flawed, (c) overly simplistic, and (d) a misrepresentation of the literature. Ryan and Deci argued that the results are over generalized simply to back up behaviorist philosophy so teachers will have no reason to resist implementing incentive systems in their classrooms. They claimed that the results were inaccurate and irresponsible, and that the meta-analysis ignored situations where extrinsic rewards are detrimental to intrinsic motivation. In response, Cameron and Pierce (1996) acknowledged that teachers need to monitor the conditions under which extrinsic rewards are used. They conceded that tangible rewards may have a slight negative effect on effort when given under a contingent basis without regard to a student's level of performance.

I have included this well documented debate to illustrate the controversy and divergence of opinions within the research field of academic motivation. I take the stance that a researcher of motivation does not necessarily need to take a position by defining his research as either extrinsic or intrinsic. In fact, I believe that these two types of motivation often work hand-in-hand, and in some cases may actually enhance one another. Though some of the ideas and theories that I will describe below clearly fall into one camp or the other, the majority of theories take some of each into account.

I have arranged the literature review into two major sections:

- An historical review of some influential and relevant ideas and theories related to motivation;
- My conceptual framework encompassing relevant research on motivation.

Historical Review

The ideas and theories that follow were chosen based upon their ability to illustrate major concepts that have been investigated in the fields of learning and motivation. Other theories certainly exist, and this review is not intended to imply that those examined are the only important or influential theories available for appraisal. In addition, this review is not intended to explain every subtle nuance that might distinguish each theory from similar ones. I have included learning theories as well as motivational theories because of the relationship between learning and motivation in the school setting.

Hull's Drive Theory

One of the early dominant motivational constructs is called drive theory (Hull, 1934). It was created by a robotics engineer named Clark Hull, and was based upon the stimulus-response bond between physiological need and behaviors intended to offset the need. Hull believed that drive (motivation) resulted from physiological disequilibrium and the innate desire of an organism to return to a more pleasant state of equilibrium. Seeing behavior as proof of motivation, Hull theorized that an organism needs energy and direction to create motivation. Hull believed that behaviors reinforced with positive results would strengthen this bond and result in the establishment of habits (Hull, 1934). He used a multiplicative formula to symbolize this relationship:

Behavior = Drive X Habit

Drive signifies the energy (based upon the physiological disequilibrium and the desire to return to equilibrium) and habit (based upon prior reinforced behaviors) indicates the direction that together would determine what the behavior would be. He theorized that if there were no drive, nothing would happen. Any number times zero equals zero. Habit times zero (drive) equals zero. There would be no desire to act at all, and thus, no motivation.

Hull's occupation (robotics engineer) and his propensity for mathematical formula influenced his epistemology. Words he used such as "proof," "stimulus-response," "physiological," and "organism" help to give a reader of his theory a good idea of his stance. Hull's theory is very basic, focusing upon "organisms" as opposed to human cognition. Though drive theory is outdated and has few present-day followers, it is a valuable stepping-stone to later theories. It appears that concepts from a number of prior theories are taken into consideration as researchers develop newer ones. Most outdated theories can help researchers to understand more about the human mind, even if they are fundamentally flawed.

B.F. Skinner: Experimental Psychology and Behaviorism

Skinner (1950) contended that the use of theory is a refuge from the data. Viewing himself as an empiricist, he maintained that those who are interested in a science of behavior will insist that learning is a change in behavior. He stated that when other researchers attribute behavior to a neural (physical) or mental (psychological) event, they are likely to forget that they still have the task of accounting for the neural or mental event. A hard-core behaviorist, Skinner said that researchers who study cognition as a

cause of behavior are sidestepping the real issue. He believed that when an animal acts in a given way because it expects to receive food, then the task of accounting for learned behavior becomes the task of accounting for expectancy. His argument was that researchers cannot account for invisible cognitive processes, and should not be in the business of interpreting them, either.

Skinner's experimental approach to motivation should be applauded for what it represents: stimulus-response and modification of basic behavior. In relation to the concept of learning, Skinner (1950) stated that the dimensions of the change must spring from the behavior itself, and that they must not be imposed by an external judgment of success or failure. Judgment is crucial to my way of thinking, and judgment is crucial in understanding motivation.

Lewin's Field Theory

Lewin's Field Theory incorporates intrinsic motivational factors, but is grounded in extrinsic belief. Lewin stated that behavior is determined by a combination of both the person and the environment around them (see Graham & Weiner, 1996, for a complete review). This theory is similar to Hull's theory (both are based upon needs), but is a bit more complicated because it includes Gestalt language, the concept of perception, and human cognition. Lewin believed that a person's need or desire creates tension. The concept of tension is similar to the disequilibrium concept described by Hull (1934), the uncertainty portrayed by Dewey (1916, 1933), the disequilibrium depicted by Piaget (1967), and the sustained contextual support illustrated by Sheurman (1995). Field theory asserts that if attaining a certain goal can ease this tension, then the goal becomes attractive. Lewin called this attractiveness "positive valence." The stronger the need, the

stronger the tension will be. The final piece to Lewin's puzzle involves psychological distance from the goal. The closer a person feels he or she is to the goal, the stronger the magnitude of motivation. The further away a person feels he or she is, the weaker the magnitude.

Like Hullian theory, field theory has a complicated mathematical equation associated with it. I have chosen not to include it in this review. By focusing upon needs, Lewinian theory has some common characteristics with the drive theory, but it also has commonalities with more modern theories. Since this theory is based on goals influencing behavior, I have categorized it under extrinsic motivation. In my opinion, though, the focus on human cognition and perception makes for a more plausible theory than the previous two. Still, motivation is too complex for a one-dimensional construct.

Atkinson's Theory of Achievement Motivation

Atkinson's theory of achievement motivation is based upon expectancy-value theory, the idea that people base their decisions to pursue a course of behavior based upon the perceived outcomes of taking those actions (Graham & Weiner 1996). This basic idea is related to Skinner and Lewin's views. It differs from Skinner, however, in its assumption that a person will choose a course of action based upon two factors: the likelihood that it will lead to the ultimate goal, and his or her perception of the goal's subjective value. Skinner is completely unconcerned with cognitive processes such as subjective value. Atkinson's theory states that a person's decision to approach an achievement-related goal is a product of three factors: the motive for success, the probability that the person will succeed, and the perceived incentive-value of success. Though this theory is a bit more complicated and uses different language, it is similar to

Lewin's field theory (e.g., mathematical equation, perception, probability of success, cognition). The vague idea of "motive for success" is mainly what differentiates the two. If researchers knew what "caused this," perhaps the magic answer would have been found. Though he did not mention a particular theory by name, Skinner's (1950) criticism of cognitive theory might be applied to Atkinson's motive for success.

Attribution Theory

Attribution theory is in line with the expectancy-value approach. In this theory, perceptions of cause and effect are temporal processes that begin with an incident and end with some behavior or behavioral intention (Graham & Weiner, 1996). Attribution theorists believe that humans are primitive scientists who are attempting to determine the causes of success and failure. Some of the most prevalent inferred causes of success and failure are ability, effort, task ease or difficulty, luck, mood, and help or hindrance from others. Weiner (1986) identified three dimensions of causality. They are locus of control, stability, and controllability.

A person's perception of internal locus of control or external locus of control will determine if a person is proud in the wake of success, or ashamed in the wake of failure. If a person believes that forces outside herself determined success in a situation, then she will not likely feel proud. After all, her contributions had nothing to do with it. On the other hand, if a person feels that she has contributed to a successful situation, then the locus of control is internal, and she is likely to feel pride. The opposite is true as well. If a person feels that the cause of a failing situation was determined by causes outside himself, then he will not likely feel shame. If he feels that he caused the failure, then shame is the probable result.

Perception of causal stability plays an important role as well. If a student perceives that her math grades are good because she has strong math abilities, then she is likely to believe that she will make good grades in math tomorrow. In this case, she perceives that her ability is strong and her perception of causality is stable. If she perceives that she is not a strong math student and today makes a good grade, she is still unlikely to expect good grades tomorrow. In that case, her perception of causality is not stable.

In attribution theory, Graham and Weiner (1996) link the controllability dimension of causality with emotion, specifically anger, guilt, pity, and shame. Different emotions are linked with the perceived causes of failure. A student might be angry with his teacher when he fails a test if he perceives that the cause of the failure is the teacher. This “external locus of control” leads to the emotion of anger. On the other hand, a person might be ashamed of himself if he attributes his failure to his lack of ability. They state that people can also be motivated (or unmotivated) by the reactions of others. In the face of failure, if a student sees pity on the face of a teacher, he is likely to attribute his failure to a lack of ability. If he sees anger, he is likely to attribute his lack of success to laziness or lack of effort.

Attribution theory addresses Skinner’s (1950) criticism of cognitive theory by illustrating some of the “invisible processes” he refers to. The hypothetical internal processes described by this theory are more detailed and much improved in comparison to the earlier theories reviewed. The cognitive operations and their relationships with each other and motivation have been influential in the construction of my own conceptual framework.

Maslow's Hierarchy of Needs

The hierarchy of needs (Maslow, 1943) is based upon the same concept as Hull's drive theory and Lewin's field theory. Like Lewin's, Maslow's theory moves beyond organisms and is concerned exclusively with human beings. One of Maslow's thirteen basic principles states that motivation theory should be human-centered rather than animal-centered. He also believed that motivation theory is not the same as behavior theory. While behavior is almost always motivated, it is also almost always biologically, culturally, and situationally determined. Maslow theorized that humans are motivated by unsatisfied needs, and that certain lower needs need to be satisfied before higher needs can be satisfied. He categorized human needs into the following hierarchy: physiological, safety/security, social/affiliation, esteem, and self-actualization. It seems that Maslow understood the limitations of his theory. He commented that his theory should be considered only a suggested program or a framework for future research, and should stand or fall based upon that future research.

I have incorporated features of Maslow's Hierarchy of needs in my own present conceptual framework on motivation. I believe that meeting a student's specific and individual needs allows the student to grow. The hierarchy incorporates aspects of both drive and field theories as well. Hull (1934) might consider Maslow's needs to be specific hierarchical grounds for the phenomenon he labeled "disequilibrium." Lewin might see them leading to the "tension" illustrated in field theory (Graham & Weiner, 1996). Maslow was able to expand upon the basics of physiological needs, while incorporating social and cognitive needs like self-esteem and self-actualization. The higher needs are of a more intrinsic nature.

Where is the line drawn between intrinsic and extrinsic motivation? Is Maslow's hierarchy of needs a purely intrinsic motivational theory? Does pure intrinsic motivation even exist? My comparisons with other, clearly extrinsic theories, have led to these questions. If unfulfilled needs influence an individual's motivation, then learning is not occurring due to a desire to know; the behavior is simply to extinguish the need. If that is the case, then the cause is extrinsic, even though the need may be inside the person. On the other hand, are the needs in Maslow's hierarchy causes of motivational behavior, or does his theory focus mainly upon the idea that lower needs have to be met before higher needs? If that is the case, then the meeting of needs is simply a prerequisite for learning. Interpretation of the literature is crucial in making this judgment. I interpret the meeting of Maslow's hierarchical needs as a prerequisite to learning in school, not an issue of stimulus-response.

Constructivism

Constructivism is not a theory on motivation. It is a theory on a way of learning. These ideas are currently a popular topic in qualitative research, and are based upon the classic works and findings of Dewey, Piaget, Vygotsky, and others. In order for a person to construct his or her own knowledge, he or she needs to be motivated to think. In early American education, rote learning was seen as the most effective teaching strategy. Dewey (1916, 1933) disagreed with that view. He claimed that learning involves reflective thinking and experience upon which to build when faced with new material. Rote learning requires little or no reflection by the student. Constructivists believe that students need to be active in their learning. Dewey believed that reflective thinking often originates with confusion or doubt, leading the child to search for a solution. This desire

(motivation) to find a solution and make connections is the guiding force in our thinking and learning, and this inquisitive experience plays a crucial role in solving these problems.

Piaget is known for theorizing about stages of biological development, but he also proposed two principles of child cognitive development: organization and adaptation (Piaget, 1967). Organization refers to the human predisposition to distribute information into related structures within the mind. Adaptation occurs when learners experience cognitive conflict. If a discrepancy arises between what a person believes and what he is experiencing, then he will search for equilibrium (similar to Hull and Lewin) through assimilation and accommodation. The person will assimilate, or incorporate, new information into already existing cognitive structures. Accommodation involves the formation of additional structures within the organization of the mind when new information or experiences do not fit into already existing ones. As humans assimilate and accommodate, they incorporate new information by relating it to their existing knowledge and personal experiences. They construct knowledge. As they attempt to assimilate and accommodate, they are learning. Though Piaget terms these “principles of child cognitive development,” they are recognizable in cognitive growth during adulthood as well as childhood.

Vygotsky’s (1978, 1986) position was more focused upon the influence of social interaction on learning and the influence of learning on development. He argued that language and culture have a powerful influence on learning. He believed that children learn from others and develop by listening to speech and attempting to imitate. As the child’s linguistic ability propagates, new information is internalized into inner speech or

thoughts. He maintained that humans need language in order to think. He also argued that learning takes place through discussion and social interaction. Social interaction is also influenced by culture. Though Vygotsky might have agreed with Piaget (1967) that knowledge is constructed, they would probably disagree over which came first, the chicken or the egg. Piaget believed that development is a prerequisite to learning, while Vygotsky argued that learning leads to development. Vygotsky's theories led to a form of constructivism called social constructivism.

One piece of Vygotsky's (1978, 1986) work that has important implications for education is a phenomenon called the Zone of Proximal Development. He theorized that there is typically a period of time when a person is introduced to a new concept or skill that he can accomplish more with help than independently. A person can be led through the Zone of Proximal Development with the help of a competent peer or adult. Negotiation of this phenomenon eventually leads to a time when the person can master the skill independently. Later interpreters of Vygotsky called this process of guiding the learner from what he or she presently knows to what he or she needs to know "scaffolding."

Dewey, Piaget, and Vygotsky agreed that strategies like rote learning restrict the individual's ability to learn and think. They also agreed that learning is an active process that requires people to search for meaning. In addition, they also believe that the stronger the significance of a problem, the stronger the motivation to search for knowledge. As someone interested in knowing what factors influence a person in choosing to engage in some academic endeavors while not engaging in others, my own philosophy matches with these aspects of their beliefs.

ARCS Model

The ARCS model is included because of Keller's synthesis of multiple theories and perspectives, not necessarily out of agreement with his foundation. It is perhaps less well known than the other theories that I have reviewed. Keller (1983) discussed the availability of a wide array of approaches to studying motivation and his decision to construct a synthesis as a foundation for building a motivational design model. He stated that the ARCS model is grounded in expectancy-theory. Keller also discussed the "continued development (p. 11)" of his model. Keller reflected that his model was in a constant state of evolution. He saw motivational theory as a cross between behaviorism, cognitive psychology, personality psychology, and humanistic psychology.

The ARCS model (Keller, 1983) defines four major conditions (attention, relevance, confidence, and satisfaction) that have to be met for people to become and remain motivated. As an application-oriented model, it uses theory in a practical manner. It is a system for improving the motivational appeal of instructional materials, of instructor behavior, and of the way in which lessons are designed. Keller claims that it is fairly easy to gain attention, but sustaining it is the real challenge for a teacher. Arousing curiosity and stimulating student interest are recommended. Instructors normally try to convince students that the content is relevant by making the instruction seem germane to present or future career opportunities. Keller believes that relevance can come from the way material is taught, and that teachers should focus upon teaching strategies. Confidence refers to a person's belief that if he tries to do something he will succeed, and is best illustrated by the story of the little choo-choo train that said, "I think I can, I think I can." Keller believes that a job well done will make a person feel better, and therefore

become more motivated to complete the job. This category, which he calls “satisfaction,” is less clear than the others. At first glance, expectancy value theories are differing forms of cognitive behaviorism. Individuals are still looking for some type of reward in return for participating in an activity, just a less tangible one. The more complex theories become harder to categorize within either the intrinsic or extrinsic schools of thought. In a sense, cognitive behaviorism combines both concepts.

My Conceptual Framework

Introduction

I have searched existing literature in an attempt to learn what others have learned about the concept of motivation. As I study each theory (old or new), I can’t help but appreciate the amount of thought that must have gone into every one of them. With this in mind, I have a hard time tossing out any of the theories completely. Seemingly conflicting theories often share commonalities. My conceptual framework is based upon my present epistemological stance, and is subject to change as my stance changes.

In my review of literature, I have noticed that, despite differences in terminology, certain pieces of motivational literature are distinctly related and logically connected by their research focus. They are linked by their focus on specific concepts under study. Seeing some factors of extrinsic as well as intrinsic motivation within most aspects of motivation, I suggest four major categories of motivational research, each of which is more likely to be implemented successfully within a classroom with a positive climate. The categories are:

- Perceived student needs, in which personal needs, physical or psychological, are seen as the core of motivation

- Locus of control-self efficacy, in which a person's perception of his or her own ability and behaviors as the means to success or failure either motivates or does not motivate them to engage in an activity
- Relevance-content value, in which student perception of the relative importance of the material is of utmost concern
- Student interest vs. disinterest, which focuses upon student perception of the interesting nature of the subject matter vs. the perceived disinteresting nature of the subject matter.

In my proposed conceptual framework on motivation, classroom climate should be viewed as the background that is likely to influence student perceptions during the implementation of the other four concepts (see Figure 1).

Many theories, frameworks, constructs, ideas, and empirical studies discuss similar concepts related to motivation, yet vary in terminology as well as organization. Although some researchers have attempted to isolate one or more of these concepts, in natural educational settings it is virtually impossible to completely insulate each of them from outside influences. Further, many researchers attempt to simplify motivation by lumping several of the conceptual categories listed above into one-dimensional constructs. Some aspects of each motivational category admittedly may fit under the umbrella of more than one. My proposed conceptual framework is not intended to imply that this is the only way to view educational motivation. It is simply an attempt to organize relevant literature and research into categories with similar characteristics.

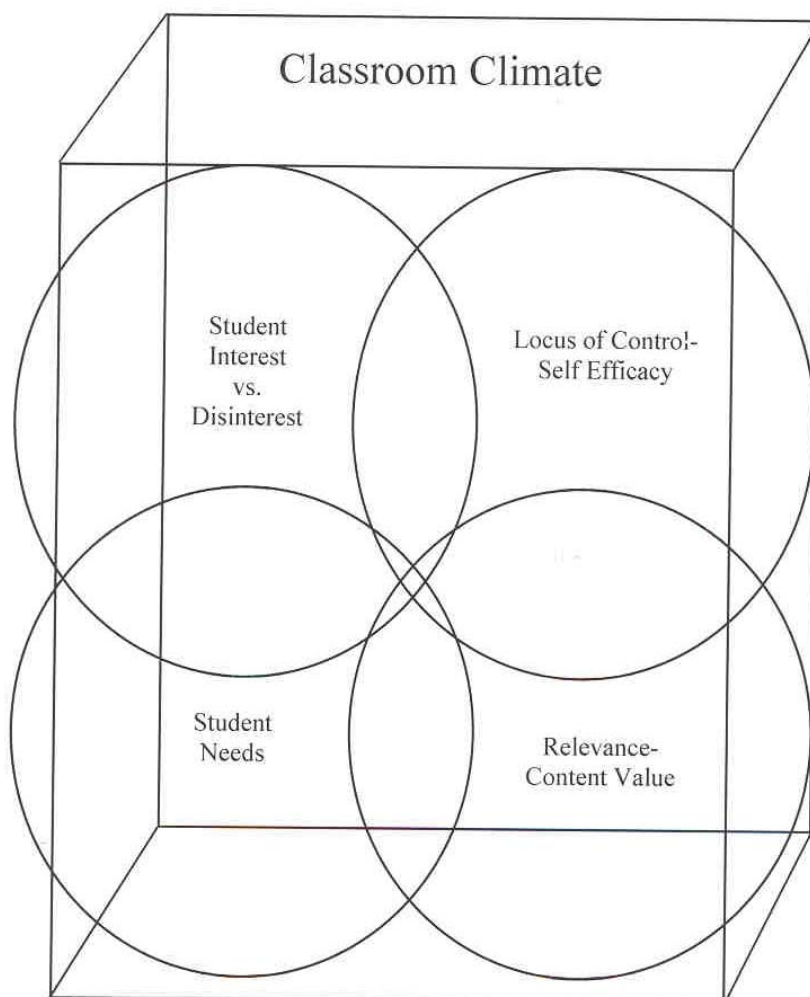


Figure 1. Conceptual framework of student motivation illustrates how classroom climate serves as a background behind which other qualities of classroom life might interact to influence student motivation to engage in learning.

Classroom Climate

A wide variety of educational anthropology studies have been conducted on the influence of school culture. Many of these studies concentrated on specific ethnic groups (e.g. Delgado-Gaitan, 1996; Gibson, 1987), racial groups (e.g. Ladson-Billings, 1994),

oppositional groups (e.g. Willis, 1977), or school cliques (e.g. Canaan, 1987). Each of these studies are more anthropological in nature, and concentrate upon individuals and groups within the realm of overall school culture.

The focus of the classroom climate section of the literature review will be on how specific qualities of middle school classrooms might influence an individual's motivation. The components of middle school classrooms that will be focused upon in this section include the roles teachers and students play, expectations and norms, the quality of interactions between teacher and student, and the quality of interactions between student and student. Each of these components is important within the realm of how individual students perceive them. Researchers have identified classroom climate and these specific aspects of classroom climate within the literature by a number of names such as environment, atmosphere, and culture. I have incorporated these under the category of classroom climate.

A teacher's job description generally includes the creation and implementation of lesson plans. As important as the lessons are, a student's perception of his or her relationship with those around them should not be underestimated. Valued participation in community is an important motive throughout life (Goodenow, 1991). Perception of valued participation leads to a sense of belonging. Goodenow describes this belonging in school as situation-specific. If this is so, a student might feel a strong sense of belonging in one classroom, and just as strong a sense of alienation in another.

Keller et al. (1978) distinguish between trait anxiety and state anxiety. A trait is a lasting characteristic of an individual, whereas a state is a temporary condition. The need to belong in school is considered a state-of-being rather than a personality trait.

Belonging in an educational setting is a matter of individual perception. As groups and situations change, so does the perception of belonging. Perceived friendliness from others and a sense of being personally valued are necessary, but are only part of the formula needed to obtain “psychological membership” in a classroom group. Goodenow (1991) maintains that belonging is clearly related to class climate, social competence, sociometric status, and perceived social support. Psychological membership in school classes can be conceptualized as involving the perception of socially and academically supportive relationships with both teachers and with other students, relationships in which respect, encouragement, and acceptance are hallmarks. The quality of relationships between teacher and student is crucial. Van Hoose (1991) asserts that it is the most important element of middle school education.

Colsant (1995) illustrates a teacher’s personal and cultural evolutionary journey, providing a brilliant example of how situational classroom climate can influence student motivation to engage in learning. After 17 years of teaching, Colsant found himself dealing unsuccessfully with difficult students in an introductory French class. During the early months of one school year, Colsant tried communicate what he perceived as the value of the official curriculum. He did this in an attempt to use it as motivational leverage while disregarding the individuality of students in his class. Students responded with detachment and resistance-not only to the French curriculum, but to Colsant as well.

After painful self-reflection, Colsant (1995) came to the conclusion that he could not control his students, and that his autocratic disposition was exacerbating the hostility the students felt toward him and his curriculum. He depicts a clearly uncomfortable but necessary teacher metamorphosis. He made peace with the students in his class by openly

exposing his vulnerability, and invited them to participate as collaborators. He became more responsive to the students first by listening to them. This change in demeanor led to a change in his relationship with the students, the climate of his classroom, and finally, a change within himself. After giving up the illusion of control, Colsant's teaching strategies began to involve students on a more meaningful level. Though he was not able to influence his entire class on a daily basis, most of his students responded.

In a longitudinal study, Oldfather and McLaughlin (1993) found that students' motivation to learn in an elementary classroom was closely related to three elements of the classroom culture: (a) honored voice, (b) collaborative construction of meaning, and (c) shared ownership of knowing through epistemological empowerment. "Honored voice" is a condition of deep responsiveness within the classroom culture to students' oral, written, and artistic self-expression. Through honored voice the community of learners invites, listens, responds to, and acts upon students' thoughts, feelings, interests, and needs (Oldfather, 1993). Muth and Alverman (1999) would agree. They contend that individuals can learn meaningfully only when they play an active role in the construction of their knowledge. The goal of the constructivist teacher, maintain Muth and Alverman, is not to transmit information, but rather to facilitate individuals' cognitive development (p. 29). As students attempt to construct their own meaning in a classroom, real learning occurs when they feel epistemologically empowered to judge the validity of, and to make their own sense out of new information. As students in Oldfather and McLaughlin's study entered the junior high school, their continuing impulse to learn was adversely affected by a dilution of relationships between teacher and student.

Pergande and Thorkildsen (1995) maintain that, in a responsive classroom community, students should respect one another, listen to one another, and work to help everyone feel included. Teachers at a school in Milwaukee stated to researchers that they believe conversation plays an important role in socialization. They were concerned because their students appeared to have trouble carrying on meaningful curricular conversation in class. Students often strayed from the topic and did not take turns. After concentrating on speech skills, they found that the students were reluctant to use the newly acquired speech skills in the classroom. Originally, they theorized that self-esteem hindered student application of these speech skills. They found though, that it was a lack of freedom to converse about topics of interest that caused this lack of enthusiasm. Once the students were invited to direct their own meaningful conversations, they were willing to practice the newly acquired speech skills. Surprising the teachers, students were already to respect one another within this new responsive classroom climate.

Pierce (1994) studied a teacher in an urban setting with a high at-risk population. This teacher created a classroom climate that nurtured the emotional needs of her students by showing care, respect, and physical closeness. Pierce determined that this climate diminished the possibility of failure in the teacher's room, and helped her students to develop a sense of safety and security. The climate of a classroom is directly related to students' social attitude. If a student learns through social intercourse, as social constructivists believe (Oldfather & McLaughlin, 1993; Oldfather & Dahl 1995; Von Glaserfeld, 1996), then the classroom climate will have a major effect on a student's learning.

While this literature is closely related to literature about student needs, I chose to separate them and identify the classroom climate as a unique category. Classroom climate serves as the backdrop for much more than the students' needs. If a teacher desires for his or her students to socially construct knowledge in the classroom, it is crucial for that teacher to create and work to maintain the appropriate social climate in the classroom. This climate should support the concepts of honored voice, collaborative construction of meaning, and shared ownership of knowing through epistemological empowerment of the students.

Student Needs

The various theories embracing student needs and the relationship of these needs with student desire to learn can be traced back to drive theory (Hull, 1934) and field theory (Lewin, in Graham & Weiner, 1996), and the hierarchy of needs (Maslow, 1943). Out of the four research categories, I see this category as having the closest bond with classroom climate. Many student needs can actually be met by the way that a teacher sets up his or her classroom. Others may be met through the structure of an academic team.

Glasser's Control Theory (1986) is based on the idea that people's motivation is controlled by their needs. His definition of people's needs include belonging, love, gaining power, having fun, and being free. Glasser contends that a student whose needs are not being met will pay very little attention to academic subjects. His definition of "needs" crosses the borders of the categories established in this review of literature. The needs to belong and to be loved are important aspects of social constructivism, and would be more effective under certain classroom cultural conditions. A person's need for "gaining power" could possibly be placed under the category of locus of control-self

efficacy, whereas the need for “having fun” could be placed under student interest and arousal seeking. Glasser might argue, however, that each of the factors associated with my categories is simply fulfilling student needs, and therefore fits neatly under the umbrella of his control theory.

Goodenow (1991) maintains that the need to feel a sense of belonging and valued participation in community is often stronger than other motives. She claims that such belonging can have a greater impact on classroom effort than even the intrinsic value and interest that students hold for their academic subjects. The association between belonging is higher for some academic subject classes, for example low-consensus subjects such as social studies, which require participation in open discussion and may emphasize students' ability to interact easily with others.

In the Michigan Adolescence Study, Eccles, Wigfield, Midgley, Reuman, Mac Iver, and Feldlaufer (1993) blended the idea of student needs with school and classroom climate. They conducted a large-scale 2-year, four-wave longitudinal study of the effects of change in school and classroom environments on early adolescents' achievement-related beliefs, motives, values, and behaviors. The focus of the research was on how changes in classroom environments and teacher beliefs in the elementary to middle school transition related to changes in student motivation. The theoretical foundation of the study was the "Stage-Environment Fit" theory (Eccles & Midgley, 1989). Eccles and Midgley contend that there may be a mismatch between early adolescent student needs and the typical junior high classroom atmosphere. Eccles et al. (1993) found evidence of an increase in teacher control and between-classroom ability grouping, and a decrease in teacher efficacy and the quality of teacher/student relationships between the sixth grade

elementary math classroom and the junior high math classroom. In short, the results confirmed the proposition that there may be a disparity between the needs of early adolescents and the type of school and/or classroom environment offered to them.

Locus of Control-Self Efficacy

The concept of "locus of control" refers to a person's expectancy regarding the controlling influences on personal successes and failures (Keller, Kelly, & Dodge, 1978). People with a stronger internal locus of control will be more motivated than people with perspectives of external sources of control. In a given situation, if a person believes that his actions will have a direct impact on the success or failure of a task, he is more motivated to complete the task to the best of his ability. On the other hand, if he sees the result of the situation as out of his control, he is less likely to do this. Weiner (1986) mentions locus of control by name, but it is prevalent in all three of his dimensions of causality: locus of control, stability, and controllability. In Keller's ARCS Model, the "C" represents a person's confidence in their abilities.

Deci (1975) uses the term "competence" to describe a person's perspective that he has control over a situation. According to the Cognitive Evaluation Theory, Deci proposes that activities that enhance a feeling of competence and self-determination are intrinsically motivating. Learners need to actively explore situations where they feel competent and self-determining. The Cognitive Evaluation Theory (Ryan, Connell, & Deci, 1985) addresses the effects of factors such as rewards, external evaluation, constraints, and styles of interpersonal communication. It consists of three propositions. First, fundamental to intrinsic motivation is the experience of autonomy or agency. Any incident that facilitates the perception that a person can control outcome of an activity

will increase intrinsic motivation to engage in that activity. Second, any event that enhances a person's perceived competence will tend to increase intrinsic motivation, while an event that enhances a person's incompetence will decrease intrinsic motivation to engage in the activity. Third, perception of competence is situational, and subject to interpretation by the person choosing or not choosing to engage in an activity.

If perception of competence is situational, then it is safe to assume that the classroom teacher has the ability to control the variables that help to determine whether or not students develop locus of control in a classroom setting. Vallerand, Blais, Briere, and Pelletier's study (as cited in Karsenti & Thibert, 1995) showed that non-motivated students perceive their actions as caused by forces out of their own control. When a person is required by another to complete a task in order to receive a reward, Keller (1983) claims that an external force has taken away that person's ability to control his own life. This perceived lack of control might create resentment.

Webb and Baird (1980) contend that unmotivated students are irresponsible learners. These students can be helped to take responsibility by using "norm setting." This strategy is a cooperative-decision making process between the students and the teacher in order to establish norms of behavior for the classroom. Webb and Baird argue that when a teacher uses norm setting, students will gain a sense of ownership in the classroom. This concept overlaps the classroom climate domain. Pierce (1994) found that student ownership of classroom rules leads to a better understanding of and to internalization of these rules. This ownership will increase students' perception of control over their own situation. According to the "locus of control" theory, the impression of

individual control should increase student motivation to achieve in this particular classroom.

A classroom teacher who makes material seem overly abstract often wants to know how to motivate students to do work. Through my own experiences, I have observed that the classroom teacher who makes abstract material seem comprehensible, tends to have more motivated students. Making abstract content more concrete or familiar is recommended by Hootstein (1994). Analogies and metaphors can show new information in already understandable form and context. Hootstein contends that if students see a particular topic as clearly understandable, then the student will be more likely to make the attempt to complete the activities related to it.

Relevance-Content Value

"When will I ever need to know this?" is a common question asked by students in school. Students must be engaged in meaningful tasks for efficient learning to take place (Brophy, 1982). Hootstein (1994) recommends that the teacher make the intended value of learning explicit. Without perceived linkages of material and a sense of its potential usefulness, Van Sickle (1990) maintains that students are unmotivated to learn social studies. I would argue that that Van Sickle's ideas might be transferred to other subjects as well. The relevance of information, argues Keller (1983), comes from the way material is taught, and does not necessarily need to come from the content itself. If the content under study is not explicitly important to students, then the teacher should create lessons that accentuate the content's potential significance.

Hootstein (1995) maintains that the content and context of what students learn from an activity is determined largely from their personal experience. This experience

provides students with the information that enables them to bring meaning to the subjects they study. Personal meaning, or relevance, is inherent in subject matter only to the extent that students have sufficient prior experience that they can relate to it. Dewey (1916, 1933) and Piaget (1967) would agree. If teachers do not know their students well, it makes it more difficult to link their material to the students' experiences. If teachers link student background experience with subject matter, then students will more likely be motivated.

While defending his film documentary The Civil War to historians, Burns (1996) claimed that history can be brought to life with story, memory, anecdote, and feeling. He argued that there is a sense of motivational strength in tapping into people's emotions, because emotional connections become a kind of glue which make the most complex of past events stick in people's minds and hearts. This may not only lead to long-term memory, but to the internalization of subject matter and long-term interest in personal research.

Dweck (1989) identified two general concepts of orientation to achievement: learning orientation and performance orientation. When a student approaches a task with a strong learning orientation, he or she tends to be more interested in understanding the subject, mastering the objectives of the curriculum, and learning something new. When a student tackles a goal with a strong performance orientation, he or she tends to focus on obtaining favorable judgments of their ability through such strategies as grades, praise, and peer recognition. Research indicates that students tend to shift from a learning perspective in the early grades to a more performance-oriented perspective in the later grades (Van Sickle, 1996). I would argue that a student might approach two different

lessons with varying degrees of each perspective, depending upon the situation. A student viewing a lesson from each perspective sees the importance of completing it for different reasons. As long as a teacher is aware of the existence of different student ideologies, he or she can refer to each on a regular basis.

Student Interest vs. Disinterest

Is it necessary for students to be interested in subject matter in order to be motivated? The answer to this question is clearly important, since middle school students are particularly susceptible to boredom with schoolwork (Rothman, 1990). Out of 25,000 students surveyed, almost 50% claimed to be bored at least half of the time in school. Are interested students more likely to be motivated than disinterested students? Small, Dodge, and Jiang, (1996) link emotion with interest, and interest with intrinsic motivation. Student interest can be gained by the subject matter, but the means by which students pursue a goal is important as well.

What is the relationship between arousal, interest, disinterest, and boredom? If learning is too difficult or too easy, Farrell (1982) maintains that it is not appropriate and time will be wasted. Small, Dodge, and Jiang (1996), found two reasons why a person may not be motivated in academic situations: (a) no stimulus (boredom), and (b) anxiety, stemming from a perception of the task as too difficult. Although gaining student attention is a prerequisite for learning, it is not enough (Keller, 1983). Teachers need to sustain a satisfactory level of attention throughout the course. A complementary relationship exists between each motivational category; feelings of pleasure and arousal are linked to generating and sustaining current learning interest, while competence and self-determination are more closely related to fostering a continuing motivation to learn.

A student will learn better, Day (1982) argues, when heightened awareness and level of attention cause a student to become aroused.

Similar strategies were recommended (Kopp, 1982; Hootstein, 1994; Small, Dodge, & Jiang, 1996) for teachers with the intent to stimulate, arouse, or make students curious by offering novel, surprising, mysterious, incongruous, or uncertain information. Curtis and Shaver (1980) assert that discussing controversial issues increases student interest in social studies. Hootstein (1993) states that teachers can actually create a discrepancy by providing conflictual and paradoxical information. Harden (1991) suggests that where the evidence is in conflict, student judgments can be made. Webb and Baird (1980) maintain that incongruity leads to deep learning.

In differing degrees, nearly every theory I described above would subscribe to this belief. In drive theory, Hull (1934) claims that organisms strive to maintain equilibrium. Hull might argue that conflictual or paradoxical information is likely to produce a state of disequilibrium, thus creating drive. Field theory states that a need or desire (could paradoxical information create this?) creates tension, thereby causing an individual to perceive the need to act. Atkinson's theory of achievement motivation might see the conflict as increasing the subjective value of the information under study, thereby satisfying one of the two prerequisites for motivation.

This category is clearly related to why and how a person acquires knowledge. Dewey (1916, 1933) would argue that perceived conflict might be confusing to the student, thus leading to reflective thinking. The desire to resolve the conflict and make connections might result in a student's motivation to become active in his search for truth. Piaget (1967) would argue that adaptation might occur as the student strives to

assimilate and/or accommodate the conflictual information. As the student does this, she will need to make judgments on each paradoxical piece of information. The student will judge the information based upon her own experiences, preexisting knowledge, and perception of the conflict. If one finds something of interest, she will most likely become more knowledgeable about it (Csikszentmihalyi, 1978, Gottfried, 1983; Oldfather & Dahl, 1994; Oldfather & Wigfield, 1996; Ryan, Connell & Deci, 1985). The concept behind Oldfather's constructivist (1992) "Continuing Impulse to Learn" is clearly evident in this assertion. As the student strives to seek true understanding by constructing her own perceived truth, she will be active in her own learning.

Another complementary relationship exists between categories. If incongruity and paradoxical information lead to student interest, it cannot move forward into real learning if a teacher tells students the correct answer. Students may create their own perceptions of truth with encouragement from a constructivist teacher who has created a classroom climate where students feel welcome and competent do so. It plays an important role in whether or not students will be willing to open themselves up to criticism by partaking in discussions on controversial issues in social studies classrooms. Teachers should encourage students to share their perspectives, Hahn (1996) argues, by providing an open and supportive classroom with a democratic focus.

Webb and Baird (1980) make an argument for inquiry-based instruction stating that "you cannot give an answer to someone who has not asked the question." Colorful instruction that incorporates a variety of attention gaining and maintaining strategies appears to be the most effective for generating interest and preventing boredom (Small et al., 1996). Harden (1991) recommends that teachers use adolescent fascination with

murder, mayhem, and rebellion as a means to arouse adolescent interest in the social studies. These recurring themes in social studies may be used to hook student interest, as a natural entree to more meaningful study.

Teachers can make learning more interesting by using peer tutoring, cooperative learning, role playing, simulations, discussions, projects, and tasks with game-like features (Hootstein, 1994). Students react adversely to the passive strategies, such as teacher-dominated lecture, with which social studies is usually taught (Schug, Todd, & Beery, 1984). They prefer instructional strategies that actively engage them in learning. To prevent boredom, Hootstein (1993) claims that adolescent students need to pursue interests in active ways; they prefer socializing and working with their hands rather than merely listening or reading. Vygotsky's (1978) social constructivist views are consistent with Hootstein's claims. He believed that students learn through social contact. Hootstein (1995) identified the 10 most frequently used motivational strategies used by eighth grade history teachers. They are: (a) simulations, (b) projects, (c) review games, (d) relation of material to real life, (e) historical novels, (f) thought provoking questions, (g) guest speakers, (h) videos, (i) cooperative learning, and (j) hands on experiences. In the same study, students identified role playing through simulations as the best strategy used by teachers, then group discussions, dramatic presentations, watching videos, and review games.

Summary

Though a plethora of literature exists on the concept of student motivation, there is little agreement among researchers. A number of prominent theories have come and gone; yet the influence of nearly all of them persists. I reviewed some interesting theories

that have helped to shape my views of motivation, and then introduced my own framework for organizing the various concepts evident in motivational literature. I suggested four major categories of motivational research: perceived student needs; locus of control/self efficacy; relevance/content value; and student interest vs. disinterest. I theorized that each of these strategies (alone or in conjunction with others) is more likely to be implemented successfully within a classroom with a positive climate.

I do not believe that any theory alone can completely explain or predict student motivational behavior in schools. I do believe that theory can help researchers and practitioners to visualize and organize their thoughts on the concept. The conceptual framework I have created is intended to corral and organize pieces of the various theories and ideas related to motivational behavior into a comprehensive and easily understandable format. By assigning specific names to categories of ambiguous invisible processes, the conceptual framework removes some of the vagueness and allows a teacher or researcher to label and organize motivational goals and observed behavior.

For the purposes of this study, my conceptual framework helped me to focus my interview questions and my observations, while providing me with labels to describe specific ideas, perceptions, experiences, and behaviors. Further, I used the framework to organize and present the data that I collected. The data served to illustrate evidence or examples of specific ideas, lessons, situations, and/or actions that influence student motivation. I sought examples that help to illustrate pieces of the various motivational categories within my conceptual framework while searching for evidence of student motivation that did not fit readily into my framework.

“Teachers’ and student teachers’ common sense on motivation is often given little credence by researchers, and teachers often reciprocate by questioning the relevance of research” (Nichols & Nolen, 1995, p. 5). As a result of this study, I hope to see my conceptual framework used by other researchers to classify motivational perceptions and experiences. It might also function as a bridge between educational theory and practice. It might help teachers to classify their common sense ideas and their experiences into categories. Once a teacher’s philosophical beliefs on motivation are clear and organized, he or she can work to establish a positive classroom climate, then create and apply practical lesson plans that might focus upon specific motivational ideas. Knowing in advance that each motivational strategy attempted may not inspire every child, but with goals and motivational ideals clearly defined, the teacher might be more focused upon what he or she needs to do in order to motivate his or her students. With consistent reflection upon theory and practice, success and failure, the teacher can adapt his or her thinking and educational practices to fit the specific needs of his or her students.

CHAPTER III

METHODOLOGY

A researcher's epistemological stance and purpose for conducting a study need to be well thought-out before making methodological decisions. I was interested in learning more about what students' reasons are for being (or not being) motivated in school. Comprehending my participants' reasons for actively engaging (or not engaging) in learning necessitated an understanding of student ideas and how they perceive their classroom climates: particularly, their experiences, interactions, and relationships with important individuals and groups at school. How do students' perceptions of these issues (and others) influence their decisions to engage (or not engage) in active learning? With this in mind, my research goals were to enlighten my readers, my participants, and myself. This study built upon previous research by not only providing more insight into what teachers might do to help motivate their students, but what they might avoid so they do not turn students off to learning.

Creswell (1998) suggests several reasons why a researcher might choose qualitative methods over quantitative methods. He starts with the focus of the research question. He states that qualitative studies often start with a "how" or "what" rather "why." Other strong rationales for engaging in qualitative inquiry include: (a) the need for exploration of the topic and the development of theory; (b) the need to present a detailed view of the topic; (c) the choice to study contextual data through individuals in their own setting; (d) an interest in writing in literary style; (e) a willingness to spend

sufficient time and resources in the collection of extensive data; (f) a receptive audience to qualitative research; and (g) the researcher's role as an active learner who can tell the story from the participants' view rather than the expert view.

I chose to conduct a qualitative study because the perceptual nature of the data I was interested in collecting and analyzing befitted a thorough data set from a small number of people. Each participant's story contains its own distinctive character that is revealing in its own way. Each story has been embedded in a time and place, and needs to be interpreted as such, contextually. The stories disclosed by each participant are not only embedded in a particular time and place, but the time in which the story was told has captured the participant's temporal perception of his or her experience. If each participant's stories were told in a different time, place, or frame of mind, they would likely have varied.

Each participant is the authority on his or her unique set of perceptions. Wolcott (1994) suggests that description, analysis, and interpretation are the three primary ingredients of qualitative research. A qualitative approach has provided me with the opportunity to illustrate my students' perceptions of their experiences. Using multiple sources of data collection, I was able to analyze and interpret these perceptions in a thorough, descriptive written format. My analysis helped to organize each participant's thoughts while highlighting the similarities and differences between participants and linking them with existing motivation literature. Each story in my study was told through analysis of narrative (Kramp, in press). Writing in a literary style, I approached the data by developing categories or thematic units. I analyzed each participant's story by sorting

relevant data and organizing it within categories or themes while identifying common (and contradictory) elements.

Creswell's (1998) suggestions for choosing a qualitative study suited my needs and the direction of my study. A qualitative approach was most appropriate to express my research goals. The specific methods I used in my research study will be discussed throughout the following sections.

Research Design

Merriam (1998) describes a case study as intensive descriptions and analyses of a single unit or bounded system. It is appropriate when a researcher seeks an in-depth understanding of a situation and the meaning for the participants involved. Hamel, Dufour, and Fortin (1993) maintain that a case study is an approach that is driven by the desire to establish a sociological study based upon a particular case. Creswell (1998) asserts that the case study can involve multiple cases, as long as they are bound together by time and place through an event, an activity, or the individuals involved. I conducted a qualitative case study using analysis of narrative to create multiple cases and a cross-case analysis.

The goal of the researcher performing analysis of narrative is to understand a person's perceptions through raw data and interpretation. Keeping my research purpose in mind, I was more interested in gaining deeper understanding from fewer individuals rather than survey information from large quantities of individuals. In order to guard against attrition while maintaining depth, I began my research with four participants. Fortunately, all four remained throughout the study.

Description of School Context/Site Selection

This study was conducted at an affluent suburban middle school in the Southeastern United States on the fringes of a large metropolitan area. Historically, the community in which the school is located has been roughly 96% white, and in recent decades there has been a shift from a mainly rural to a suburban population. At the time the study was conducted, most parents were professionals who commuted to the downtown area of the large city. Most of the students were college-bound and a great emphasis was placed upon student achievement.

For purposes of anonymity, I used a pseudonym for the school. At the time of the study, Broken Arrow Middle School had approximately 1,000 students and 68 teachers. The school housed grades six through eight. The sixth grade had 6 academic teams (called pods), the seventh grade had 5 academic teams, and the eighth grade had 3 academic teams. Teams of teachers were provided with an 80-minute common planning period daily. Constantly seeking to improve itself through shared governance, the school was a member of the League of Professional Schools (see Allen & Glickman, in press; Allen, Rogers, Hensley, Glanton, & Livingston, 1999). The administration had a reputation for a willingness to listen and a commitment to respond to the staff, parents, and students.

As an eighth grade social studies teacher at Broken Arrow Middle School, I had a clear interest in and easy access to the Broken Arrow school population. Rossman and Rallis (1998) contend that, when choosing the ideal site for a study, the researcher should take certain important criteria into account. They claim that the ideal site should be one where: (a) entry is possible for the researcher; (b) there is a rich mix of the processes,

people, programs, interactions, structures of interest, or all of these; (c) the researcher is likely to be able to build strong relations with the participants; and (d) ethical and political considerations are not overwhelming. Broken Arrow Middle School fit each of these criteria explicitly.

Classroom Context

I believe that middle schools should provide students with opportunities to develop a sense of belonging within the school community. A school with this goal might offer clubs, sports, drama, and other activities. Within the classroom, I believe that teachers should create a community that encourages meaningful participation in issues that are important to the students. In my opinion, it is the teacher's job to facilitate the process by exposing students to various issues; especially in social studies.

I believe that students learn from social interaction with their peers and with significant adults. In history class, I often focus upon controversial issues in order to help my students learn. When none are readily available, I do my best to create one. The best kind of controversial issues might incorporate a broad concept based upon a particular case. This way, when students comment on the particular case, they need to be aware of the broad implications their stance might have. In making sweeping judgments about a broad concept, students need to be aware of the specific ramifications their statement might have on a particular case. In my classroom, I rely upon other students in the class to critique individual arguments. In order to encourage participation by all, grudging respect for opinions that might not match their own is encouraged.

The community-of-learners take responsibility, and often forbid words like stupid before we even begin a discussion. Criticism of ideas is expected to be constructive. Pate,

Homestead, and McGinnis (1997) argue that active participation by students will result in ownership, leading to greater motivation. I agree. In my opinion, students must be actively involved in the learning process in order to gain real enlightenment. I am convinced that students' minds cannot be engaged unless they are motivated.

I believe that it is important for students to have the opportunity to voice their opinions to an informed audience in a "safe" environment. This gives students a chance to hear their own voice, and also to see what kinds of reactions their opinions might generate. While expressing their opinions, students practice communication skills, and become aware of biases in themselves as well as in others. While listening to others express their opinions, students are made privy to beliefs that they may not have known existed. Getting involved in their own learning, they often make judgments critical of their own logic as well as the reasoning of their peers. Two characteristics of my classroom that I believe encourage students to take the leap-of-faith and actively engage in their own learning are respect and trust.

Beane (1993) maintains that the middle school curriculum should be grounded in democracy. Consistent with constructivist philosophy, he argues that the democratic classroom includes lessons where students are encouraged to critically analyze information rather than passively memorize it. I do not believe that competence can be achieved by the memorization of useless facts that can easily be forgotten immediately after a test. It needs to be achieved by analyzing the various meanings beyond the subject matter; by asking critical questions, making judgments, and by students constructing their own meaning from the subject matter. This type of learning would be difficult in a classroom in which the authoritarian teacher is the ultimate authority on everything; an

authority that assessed student learning based upon inflexible opinions he perceived as “the truth.”

I believe in teaching students how to think for themselves. In my discipline, I have come across many professionals who believe that the official truth is written in the textbook. These teachers don’t seem to think beyond the boundaries of what they perceive to be orders from local district administrators. In the sixth and seventh grade social studies curricula, students learn about world geography and cultures. In the eighth grade, they learn about state and United States history. The sixth and seventh grade teachers have a great opportunity to teach students about perceptions and multiple points-of-view. Students in that age group are beginning to have the capacity to understand multiple perspectives. This is a great opportunity to help them learn this important skill. World geography and culture is the perfect vehicle to do that, yet students are continually forced to memorize each country’s capitals and gross national product along with major exports and other nonsense. Most of the time, students are taught to memorize and regurgitate this type of material, but are never asked to use it, judge it, or truly understand it.

My goal for students is not memorization of factual material. I attempt to help them make connections with concepts they are already familiar with in order to make sense of the world. Relating new concepts to existing knowledge by assimilating (Piaget, 1968) new knowledge is learning. Dewey (1916) encouraged thinking in the classroom. He maintained that thinking itself is an experience, and that no meaningful experience is possible without thought. He suggested that teachers create lessons that encourage students to actively participate with concrete activity and practical relevance. I am

convinced that students don't get enough opportunities to actually think in school. Research claims adolescents are yearning for more autonomy, yet they are regularly exposed to educational situations over which they exercise little or no control (Beane, 1993). Students at this age are beginning to comprehend more abstract concepts, yet their thoughts are often confined by educational tradition to simple tasks they find meaningless. In the classroom, teachers traditionally assign work, students complete it (or choose not to complete it), teachers assign a grade, and the cycle repeats itself.

When new students come into my eighth grade class, they are shocked to find out that there is more to social studies than memorizing a bunch of useless facts. As lessons develop early in the school year, students begin to realize that most historical events are interpreted and subsequently reported in more than one way. Students are accustomed to one-way learning where the teacher (or other adult) provides them with an explanation, usually requiring little of the student. In the typical classroom, students are able to remain passive. Seeking answers and constructing their own knowledge is rare. As the teacher, I create situations to help students learn the skills for making their own careful and well thought out judgments by providing them with opportunities to practice without fear of failure. When I observe students becoming more comfortable with the idea of creating their own judgments, I see evidence of epistemological growth.

I offer students materials for further inquiry into most topics that we study in class. Evidence of this can be found at my continually evolving web page. For purposes of confidentiality, I have not included the web address. Students who become interested in something we study in class can find links to multiple sources on many of the topics.

In addition, I encourage students to conduct their own research. When I am successful in this endeavor, students bring in new sources that I can share with my future students.

I encourage students to judge historical characters for their beliefs and actions, and challenge them to think beyond their own value-set. It is my belief that, in the end, students who are exposed to other beliefs might tolerate people who are not exactly like they are. Life skills such as getting along with other people and understanding that people think differently are important. I try to help students develop these skills by setting up classroom situations where they are forced to encounter other opinions while coming face-to-face with their own set of beliefs. Changing student opinions is not my goal. Challenging them to think and to understand why they think the way they do is my objective.

“You learn something new every day.” I don’t know who coined this phrase, but I feel that it is appropriate. I believe that people are constantly learning. As a teacher, I feel the need to model competency, but without fear of admitting that I am not “all knowing.” I feel the need to not only acknowledge and affirm multiple perspectives, but also to help younger people develop the ability to recognize and respect the existence of these perspectives—especially within themselves.

Participant Selection

According to Hamel, Dufour, and Fortin (1993), critics have faulted the case study format for its lack of representativeness. In choosing participants, Merriam (1988) distinguishes between two types of sampling, probability and nonprobability. In traditional research, the most familiar example of probability sampling is random sampling. With this type of sampling, the researcher can specify the probability that each

segment of the general population has been included, and thus represented. This type of sampling is common in quantitative research. In nonprobability sampling, there is no assurance that any representative segment of the population has a chance of being included. Since generalization in a statistical sense is not a goal of qualitative research, participants are not intended to be considered representative of the general population. Merriam maintains that these types of sampling methods are logical when researchers are attempting to discover what occurs in a situation, the implications of these occurrences, and the relationships between occurrences.

Merriam (1998) advocates a type of nonprobability sampling called purposeful (Patton, 1980), or criterion-based (Goetz & LeCompte, 1984). They are based upon the idea that the researcher needs to select participants who can help him learn the most about the topic under study. The researcher needs to establish the guidelines and standards necessary for individuals to be included in the study, then find people who meet these criteria. Creswell (1998) calls his version of this method criterion sampling. When conducting a study in order to analyze a particular phenomenon, he states that the researcher should make sure that all cases meet some criterion. Goetz and LeCompte (1984) created a list nine criterion-based sampling strategies that can be used to identify a sample prior to a study or in the early stages. I used a variation of the “ideal-typical-bellwether-case selection technique.” In this strategy, the researcher develops a profile of the best, most efficient, most effective, or most desirable participants, then finds a real-world case that most closely matches that profile.

The most obvious criterion I used in the selection of my participants was their roles as middle school students. In addition, I selected the participants from my own

eighth grade classes at Broken Arrow Middle School. This gave me the opportunity to develop strong relationships with these students while providing me with the time and convenient proximity for collection of field data. Taking the purpose of my study into account (I was investigating middle school students' reasons for choosing to engage or not to engage in their own learning in school), I wished to select a cross section of four "information rich" participants from a pool of 102. Because of concerns that the teacher-student relationship might have the potential for coercion, I decided not to approach individual students with requests to join my study.

Instead, in order to avoid the possibility that chosen students might perceive my requests as de facto demands, I announced my intention to conduct a study on motivation to each of my classes. Within the body of these announcements, I described my study and the specific functions students would be requested to participate in if they chose to volunteer. At this time, I told students that I would be working with four students who would be chosen randomly from the list of volunteers. I invited any student who felt like he or she had something important to say to an audience of teachers and university professors about motivation to sign up as a possible volunteer for the study. I made every effort to ensure that students understood that this was purely voluntary, and that volunteering to participate or not volunteering to participate would have no impact upon individual grades. In addition, I ensured students that, having signed up initially, they could certainly change their minds if they were chosen and had a change of heart.

Forty-four students signed up to volunteer. Having planned to choose two girls and two boys, I categorized my volunteers by gender and randomly chose two of each. I approached each prospective participant with a concrete offer to participate, details of

what participation would likely entail, and a genuine offer to back out if they so chose. When each participant accepted my offer to participate, I called his or her parents, discussing participation and consent. When each parent verbally agreed to allow his or her child to participate, two copies of the consent form were sent home for parent signatures.

Data Sources and Collection

In her discussion on data collection procedures, Merriam (1988) claims that qualitative case studies rely heavily upon qualitative data obtained from interviews, observations, and documents. Yin (1994) is more specific. He outlines six forms of data collection most commonly used in case studies. They are: documents, archival records, interviews, direct observation, participant observation, and physical artifacts. Yin notes that no single source has a complete advantage over all of the others, and that the various sources are highly complementary. He also claims that a good case study will use as many sources as possible. Combining dissimilar methods of data collection is called methodological triangulation. Merriam (1988) asserts that the use of multiple methods will strengthen a study. The flaws of one method of data collection can often be offset by the strength of another. Through in-depth interviews, observations (direct and participant-observations), archival data, documents, and physical artifacts, I documented and analyzed four cases of perceptual and epistemological issues related to the motivation of middle school students.

Interviews

Much of my data was collected through interviews with my participants. “The main purpose of an interview is to find out what is ‘in and on someone else’s mind’”

(Merriam, 1988, p. 72). Looking back at my research question, perception plays a fundamental role. I could only gain access to a participant's mind through quality interaction. Yin (1994) asserts that the most common type of case study interview is open-ended, in which the researcher asks participants for opinions as well as for specific facts about an event. The opinions he refers to are the perceptions I sought. Merriam claims that some interviews are merely conversations with a specific purpose.

I conducted a total of 13 semi-structured, tape-recorded interviews. Each of the four participants engaged in three separate 30-minute interview sessions and one group interview. Creswell (1998) recommends that researchers design a research protocol. Merriam (1988) recommends that, when certain information is desired from all of the respondents, the researcher use a semi-structured interview. They are guided by a list of questions or issues to be explored, but neither the exact wording nor the order of questions needs to be followed.

In the creation of my interview questions, I took Merriam's advice and attempted to word the questions in such a way that they were meaningful to the participants. I created an interview protocol for my first interview (Appendix C) that drew from each of the motivational categories described in my conceptual framework. My follow up interviews were based upon compelling responses that participants shared in their initial interview and the classroom observations I conducted in the intervening time. I had originally created a question bank (Appendix D) to illustrate the types of questions I might have been likely to ask during follow up interviews. My group interview (Appendix E) was for cross-analysis purposes and also used as a brainstorming session.

During this interview, the discussion remained informal, and that the interaction between the students uncovered some common ideas and beliefs that individual interviews missed.

I conducted my first set of interviews in November, and completed the second and third in December and January respectively. I conducted my group interview in early February. I chose to engage in individual interviews (as opposed to group interviews) during the majority of data collection because of the adolescent tendency to influence each other's opinions. The group interview session was the last formal session, and served as an opportunity for students to brainstorm and try out ideas and opinions in the presence of peers.

Observations

As important as they are to gain entry into respondent's minds, interviews should always be considered verbal reports (Yin, 1994). As such, they are subject to bias, poor recall, and poor or inaccurate articulation. Yin claims that a reasonable approach is to corroborate interview data with information from other data sources. The most common form of corroborative data collection is observations. Merriam (1988) contends that observation is the best technique to use when an activity, event, or situation can be observed first hand, when a fresh perspective is desired, or when participants are not able or willing to discuss an issue. With the proximity that I had to the field, I had the ability to observe first hand. The main purpose of my observations was to gain a fresh perspective. The field notes I took during the ongoing observations provided me with specific incidents and behaviors I referred to during later interviews. Observations helped me to methodologically triangulate my interview data and analyze the perceptions of my participants.

The observations I conducted were limited to school and school-related activities. During the five-month data collection period, I observed my participants as a participant-observer in my own classroom, in the halls between classes, and during various other school-related activities. As a teacher, I informally observe the attitudes and behaviors of the students in my classes on a regular basis anyway. This helps me brainstorm and develop strategies for motivating them. For the purposes of this study, I mentally noted observations of my participants and journaled them at least twice weekly during reflection periods after school or during my planning period.

After the first interviews with my participants in November, I shadowed each of them for one school day. During these formal observations I took detailed field notes of my observations, including the context of each classroom and activities, and their apparent influence upon the behaviors of my participants. Through observations I was able to reach the data from a different angle. This gave me the opportunity to offer the participants some new fodder for thought during subsequent formal interviews and when I conversed with them informally. During the second, third, and group interviews, I asked participants to explain what they were thinking at a particular time during a particular activity, or why they behaved in a particular way.

In order to probe into specific participant's comments about certain issues and/or classes, I added two to three extra classroom observations for each participant. These extra observations took place during the months of January and February as I sorted through and analyzed the data. In addition, the observations helped me determine which issues were most appropriate to probe into with each participant during my two follow up interviews and the group interview.

Gaining access to other classes posed little problem. The administration at Broken Arrow Middle School had been encouraging and supportive throughout my studies. When I shadowed one of my participants in another academic classes, I simply arranged for a substitute to cover my own class. Observing exploratories was an even simpler matter. Students attended their exploratories during my planning period. Professional courtesy and the relationships I had developed with my colleagues helped me gain access to their classrooms.

Archival Data, Documents, and Physical Evidence

During the month of December, I studied each participant's permanent record file. Another method of data collection, this archival data provided me with some fresh insight. I used this information, along with my observations and analysis, to help formulate the direction for the final two individual interviews. Some important data that were represented in the permanent records were report cards and standardized tests. Also, I looked for other traumatic factors that might have influenced the students' long-term progress but not have been disclosed by the participant during the interview sessions (e.g. moving, divorce). I found evidence of important information that students either forgot about or did not realize was important enough to talk about. I also uncovered important data the students are not privy to (e.g. ability test results). All in all, the fresh insight helped me to think differently about, and to probe deeper into some important issues that I learned about during the earlier phases of data collection.

Current documents that I used in each case study included relevant student work, progress reports, and report cards. Given that a large portion of my interview data

revolved around the present-time, these documents helped me to cross-analyze my observations with the students' present motivation to engage in learning.

Data Analysis

According to Kramp (in press), analysis of narrative would be an appropriate method for a researcher interested in understanding a phenomenon or an experience. The format used in an analysis of narrative allows the researcher to organize his or her thoughts in a clear structure easily understood by the reader. I have presented the data by assigning each participant his or her own chapter (Chapters 3-7) and conducting a cross-analysis in Chapter 8. My thoughts on motivation are loosely organized (see my conceptual framework in the literature review section) into categories, so this method served my study well. I went into the study with some "soft" ideas about themes that helped me to develop the basis for my interviews. During analysis, theory helped to provide links between the case studies as well as with larger issues. Breaking apart the data into categories helped improve my understanding of student motivation, while creating methodical opportunities for my participants to reflect upon their own epistemologies.

The structure of my early interviews helped me develop the later ones. My analysis of narrative has broken down each participant's motivation into simple and easily understandable concepts. My analysis and subsequent presentation of the data in themes and categories provides readers with something more tangible in regards to a concept that is otherwise an invisible process. Breaking concepts down into simple and clearly understandable categories is the way I think and the way I teach, so this was the most plausible way for me to conduct my research.

Wolcott (1994) suggests that theory can serve the researcher both analytically and interpretively. I used it analytically to help provide my study with some structure during the data collection phase and during analysis and presentation. I used it interpretively to guide my thought process. Throughout my analysis, I felt that I was in the business of researching this topic in order to learn more about school-related student motivation, not to prove my theory is correct. I fully intended to bend, change, break, or add to my categories if I found data that was not consistent with or easily categorized into my preexisting conceptual framework. Because I do not believe that there is only one correct way to think about student motivation, I was hoping to learn something new from my study that will help me to continue the ongoing development of my conceptual framework. After all, my pilot study resulted in major revisions in this framework. I was careful to keep in mind that my own learning is a continual process. In Knefelkamp's (1998, p. xv) introduction to the reissuance of Perry's (1970) landmark book, he states that there have been significant elaborations to Perry's original model. I consider my framework to be a living model, subject to change as I continue to learn more about student motivation.

DeMarrais (ERSH 8420, fall 2000) asserts that qualitative researchers need to ask questions of the data and to focus upon powerful and repeated words, emotion, contrast, and metaphors to help identify the themes. Once I knew my participants (and my data) well enough, I began reading between the lines and interpreting what was implied. I observed and listened to my participants, then tried to make sense of what they were saying with their words and through their actions. I conducted my analysis of narrative by

approaching the data with the intention of separating it into these categories or thematic units.

As I collected data, I approached my analysis methodically. In my first set of interviews, I asked a series of open-ended questions that I drew from the various pieces of the literature. While analyzing the first interview with each participant, I was both deductive and inductive in my intentions. Deductively, I summarily categorized each statement by reading through the transcripts and coding individual statements into categories. Concurrently, I began to inductively ask questions of the data with the intention of following up on important and relevant concepts to probe during each participant's subsequent interviews.

Based upon the literature, I began by coding statements made by my participants as evidence of the following categories: Orientations to achievement, climate, needs, student/student relationship, student/teacher relationship, internal locus of control, external locus of control, relevance, interest, and boredom. I used large question marks to signify statements that could not be readily identified. In addition, I coded each statement as having a positive or negative influence, or possibly neutral or unclear in its influence. After I coded each interview transcript, I let them sit untouched for a week. Then I revisited a clean copy of the transcripts, recoded them, and compared my original with the second copy.

In addition to coding relevant statements into one or more of the categories described above, during a subsequent reading of the transcripts I broke the comments down into categories that were even more specific. I was able to identify evidence of student perceptions of teacher humor, respect, lack of respect, and honored voice. I was

also able to identify evidence of situational learning orientations, performance orientations, cooperative and competitive work, social constructivism, feelings of autonomy, and specific teaching methods (with student references to gaming, simulations, textbook work, worksheets, note taking, and others).

Concurrently, I began to inductively ask questions of the data with the intention of creating another set of interview questions for the second interview. While reflecting, I created a file for each participant on my computer called “Random notes on [participant’s name and interview transcript number],” which I later used to create new interview ideas for subsequent interviews.

Once I had informally coded and identified each statement to my satisfaction, I began to literally pull apart the data. For each participant, I created a file that would later become his or her individual case study chapter. I subdivided each file into the five basic categories based upon my theoretical framework, always leaving open the possibility that I would find data that did not fit into any of the categories. I used the “copy” and “paste” buttons on the word processor to copy and paste statements into the appropriate sections of each participant’s chapter. After I copied a statement, I highlighted it on the transcript file using the “highlight” button on my word processor. I did this to keep track of which statements I had already identified. When I was finished copying and pasting, I was able to easily review the non-highlighted sections of the transcript file later to seek evidence of something relevant. After subsequent interviews, this helped me find patterns while looking through raw data that I might not actually use in the final dissertation.

While copying and pasting, I began to theorize about the meaning of the statements my participants had shared with me up to that point. I began to informally

write my ideas about their statements along with possible literature matches above each excerpt that I had pasted into the new files. During my reflection periods, I spent time theorizing and writing random thoughts about each participant in my “random thoughts” files. Eventually, many parts of these thoughts would become fodder for my subsequent interviews and the basis for final analysis. In addition, these thoughts helped to prepare me for my formal observations. Between my first and second interviews, I shadowed my students, observing them in each class for one class period.

Once I had established which direction to go in with each participant, I put together informal interview question ideas for the subsequent interviews. From this point on, each participant’s interviews were different from the others. In a sense, these interviews were part of the data analysis since they were based upon my initial informal analysis of their first interviews and my classroom observations. After each participant’s second interview, I followed much of the same method of analysis as I did with the first one. The only difference was that I added new components to my regimen. I re-read the entire first interview transcript before the second interview and before my initial reading of the second interview transcript. I also compared comments made in the second transcript with those in the first one. I then added new excerpts to my expanding analysis file and performed informal analyses on each piece. During this period, I continued to constantly reflect upon my data. I slowly expanded upon the informal analyses I was performing on each excerpt of each file. I also began to shift around troublesome but important excerpts that might have shown evidence that they belong in multiple categories.

After the second interview, each participant's analysis file began to look more like a chapter in a dissertation. I continued to add to my analyses while formulating questions for my final interview that might help me to pin down some of my participant's perceptions that remained unclear to me at this point. At this point, I performed additional classroom observations to clear up certain questions I had about Jenny, Bob, and Greg as well.

After I conducted the final interview, I followed the same process that I used after the second interview. After I was done placing relevant excerpts into the appropriate chapters and specific categories and then performing informal analysis on them, I spent more time theorizing about the meaning behind their statements. I also reviewed each participant's set of three interview transcripts together to note patterns of thought. Finally, I began to relate each excerpt to the literature from Chapter Three and also from relevant literature not included therein. While completing each chapter, I began a file for random thoughts that might be included in the group interview and possibly the cross-case analysis. After the completion of my first draft of the four individual case studies, I looked over my random thoughts for each of the four participants, my random thoughts for the group interview, then re-read all four rough drafts of individual case studies. At this point I began to think formally about the similarities and differences between my participants' perceptions, then formulated a set of informal ideas for questions to follow-up on during the group interview.

After the group interview, I read the transcript and looked for similarities and differences between each participant. I re-read and edited each of the four individual case study chapters, and began to code them according to their distinctiveness or commonality

with others. I used the copy and paste buttons again, this time copying and pasting excerpts and analysis from individual case study chapters into a new file that would eventually become the cross-case analysis. Next I began using the “cut” button, and rather than relating the statements to the literature, I methodically began to weave together the similarities and differences of the four case studies, analyzing each concept one at a time.

In order to make conclusions based upon each piece of the analysis, I looked at the patterns that appeared to develop within the data. After getting to know my participants, immersing myself in the data, and reflecting deeply during analysis, many of my findings appeared to be clearly evident. Throughout the entire analysis process, I guarded against my personal bias by utilizing two peer/colleagues, who regularly read the interview transcripts and critiqued my analysis chapters. Their insights were helpful in identifying qualities of statements that I may have missed or misidentified. Their input was also invaluable during the process of formulating important concepts to probe during my later interviews.

While my data collection was taking place, my analysis had already begun. As I collected the data, I was transcribing interviews and reading them repeatedly. This allowed me to look for themes with an open mind and identify key words, key ideas, and key concepts through detailed coding of the transcripts and other data. Just about every time I looked at the data, I saw something new, or at least a little different from the last time. I began to write early by journaling about my hunches and descriptions of data. By transcribing, reading, and analyzing the data as I collected it, I was able probe deeper into specific recurring themes during my later interviews. I looked for evidence of my earlier

hunches in each piece of data that followed, and in threads or themes that I identified between pieces of data.

Ethical Concerns

The first ethical concern that I faced in the formation of my study was my plan to choose students from my own classes as participants. I needed to find a way to ensure the Institutional Review Board that I would not use my power position as a teacher to coerce my students into participating in my study or that the study would not influence student academic evaluation. In order to do this, I agreed to ask for volunteers from each of my classes instead of approaching individuals.

The biggest ethical concern that I confronted in my study was confidentiality of participants. During their open and honest discussion on perceptions of their relationships with parents and school personnel, it was of the utmost importance that participants be confident that sensitive comments could not be used to harm their relationship with significant others. I suspect that some participants might have also been sensitive to hurting others' feelings through their criticism of lessons, habits, or personalities (or personality conflicts). I had learned that during my pilot study, Mark was openly opinionated when making general comments, but was initially wary of making specific remarks that might be construed as negative about specific teachers. In order to circumvent problems like this, the relationship that I developed with participants was crucial. It was important to assure students that they were not required to discuss specific negative habits or personalities of their present teachers. They were given the option to discuss hypothetical teachers and situations or past teachers as opposed to their present teachers.

From an ethical standpoint as a teacher, it has always been my policy not to listen to students' useless gossip about and/or personal criticism of specific teachers. Given the opportunity, students can become very critical, disrespectful, and sometimes vicious in their conversations about teachers. To offset this in my study, the participants and I collaborated in the development of a set of informal guidelines concerning confidentiality for any type of criticism that came up during interviews. I sat with each participant before the first interview and we discussed how he or she might be able to convey criticisms constructively and without feeling uneasy. Before we began the group interview, we established general guidelines as well.

Another ethical issue related to student criticisms is how my participants' comments might have influenced my perceptions of certain colleagues. This did not pose a major problem for me at Broken Arrow Middle School. I have limited contact with sixth and seventh grade teachers on a daily basis. In addition, the qualities of my own teacher teammates had already become abundantly clear to me before data collection began. Some of my perceptions of colleagues were subtly influenced by participant comments, but no more than the perceptions are influenced by other factors I come in contact with on a regular basis. In addition, confidentiality and professional consideration precludes me from acting in any way based upon these perceptions.

Understanding students' perceptions of the school, teachers, and their relationships with them through honest, open, and complete constructive criticism were some of the vital ingredients that made up my study. Participants were encouraged to talk about past experiences as well as current ones. I have intentionally couched negative student descriptions and my own analyses in indistinguishable time-oriented language in

order to protect confidentiality. Rather than stating that, “Bob’s sixth grade social studies teacher...”, I stated that, “one of Bob’s previous social studies teachers...”. Pseudonyms for my participants and for their teachers were used as well. Teachers who read this dissertation cannot know for certain which school-year the sensitive and/or negative experiences actually took place. In addition, the study was not published or made available to read until participating students had already matriculated into high school.

Researcher Role

My role throughout this study was that of participant observer. It is important to note my role as teacher of my participants. I have documented my unique teacher-student-researcher relationship with each student in my data analysis. In order to keep track of my roles throughout the study, I kept a reflection journal. I often reflected upon my multiple roles as I journaled my classroom observations. Outside of my teacher role, my interaction with the participants and the significant others in their lives was devoted to understanding whatever I could about the way they think. Participants were encouraged to interact with me whenever they thought of something or came to conclusions regarding anything they perceived as important to the study. Interacting in meaningful discussions related to issues my participants deemed important helped me in two ways: These discussions contributed to the growing database of meaningful data—but also provided me with a window into their epistemological beliefs, helping me to analyze the plethora of data.

I documented my perceptions of observations and informal interactions with the participants in a timely manner and on a regular basis. I had an 80-minute planning period in the middle of each school day, and some quiet time after school when students

had gone home. At least twice weekly, I reflected upon my perceptions of my roles and my observations of the students.

Researcher Bias

The importance I place upon individual perception and construction of reality is evidenced in my epistemological stance, my teaching strategies, and my interactions with my students. It is also implicitly evidenced throughout my analysis of the data. My epistemological stance is closely related to constructivist principles. I believe in personal and interpersonal construction of knowledge. Dewey (1916, 1933) maintained that learning involves reflective thinking, which often originates with confusion or doubt, leading children to search for a solution. This desire to find a solution and make connections is the guiding force in thinking and learning. Scheurman (1995) calls this exposure to uncertainty and practice with a complex problem “sustained contextual support.” Fosnot (1996) defines learning as, “a process of struggling with the conflict between existing personal models of the world and discrepant new insights, constructing new representations and models of reality as a human meaning-making venture with culturally developed tools and symbols . . . through cooperative social activity, discourse, and debate” (p. ix).

My ideas are closely related to this theory on learning because of my own epistemology. Whitney (2000) analyzed my epistemology in his dissertation. He summarized that “John's epistemological stance as evidenced through individual and focus group interviews, observations, informal discussions, and document analysis appears to be comprised of the following major components: the importance of real world-relative knowledge, an awareness of a diversity of students' learning styles, social

constructivism, and a belief in multiple forms of motivation. John believes that each of these components contribute to how his students acquire knowledge” (p. 272). He further stated that he saw traces of an "interpretivist view of knowledge, which assumes that knowledge has multiple perspectives depending on the background and beliefs of the knower” (p. 272).

Piaget (1968) asserts that, though epistemology can be defined as the study of knowledge as it exists at the present moment, human knowledge is essentially active. To know is to assimilate reality into systems of transformations. To know is to transform reality in order to understand how a certain state is brought about. I learn by taking new information and connecting it with what I already know. The essence of and meaning behind what I already know are more than internal processes, though. They are culturally shaped. As such, they are more than just fabrications of my own cognition. I recognize that, in the classes I teach, each student has his or her own individual constructed reality. Each constructed reality is based upon an individual’s unique social experiences and that individual’s unique perceptions of these experiences. Two or more people can engage in an activity, and there will likely be multiple versions of the reality they are all sharing. With this in mind, each person is not actively creating his or her own knowledge base without connecting with the significant others in the cultural reality they are sharing.

Our basic assumptions about the nature of truth and reality and the origins of knowledge shape the way we see the world and ourselves as participants in it (Belenky, Clinchy, Goldberger, & Tarule, 1986). What is truth? What is authority? How do I know what I know? Perception and personal construction of knowledge is important to my

views of knowledge and learning. As I analyzed the data I collected during my study, I did so with my own unique perspective on the nature of truth and reality.

Validity, Reliability, and Limitations

Turner (1995) stated that self-reporting measures (e.g., interviewing) are the most commonly used methods of measuring motivation, and that these techniques have problems. Student participants may have difficulty verbally communicating their feelings and opinions. Before I randomly selected each participant from the pool of volunteers, I sifted through the list to ensure that each of them was capable of effective communication. Assuming the researcher is able to obtain participants who can communicate effectively, there are still concerns of reliability in qualitative research due to the inherent constructed reality. Both Turner and Wolcott (1994) recommend that qualitative researchers triangulate data. Archival data (e.g., report cards, test scores, parent conference forms) and reflections based upon observations to compare behaviors with self-reported data are the most familiar forms of triangulation. Using these established techniques should prove to be powerful in helping to establish the readers' interpretations of my study's reliability and believability.

Some clear limitations of this type of research might be the tendency of some stubborn or misguided researchers to try to force data into the thematic units that might be inappropriate for the data collected. I was careful not to force data that did not fit into my existing themes. This aspect of the analysis was very important for someone like me who has preconceived notions about the topic under study. I made every effort to keep an

open mind. In the representation of my analysis, I have included specific pieces of interview transcripts along with my interpretations.

Wolcott (1994) suggests that, “a pervasive problem with interpretation is the temptation to reach too far beyond the case itself in speculating about its meanings or implications” (p. 37). Researchers must be careful not to employ claims too widely, generalizing their findings too far beyond the case they are studying. The researchers’ interpretations are made within the context of his or her participants’ experiences, and readers should be urged to see them as such.

Merriam (1998) suggests that the researcher seek help through peer/colleague examination, where the researcher seeks input from respected colleagues while reviewing and interpreting the data. DeMarrais (ERSH 8420, fall 2000) highly recommends this as a strategy as well. This strategy helps the researcher to avoid stretching the data to fit preconceived notions and to detect other themes that he might miss on his own. I sought others’ input consistently throughout my data analysis. Though my interpretation of the data is important, the inclusion of other perspectives has contributed to a well-rounded analysis. Merriam identifies three other ways that a researcher can improve internal validity in a qualitative study: (a) member checks, (b) statement of researcher’s experiences, assumptions, and biases, and (c) submersion-engagement in the research situation. I used member checks by asking participants to proofread their transcripts. After each interview was transcribed, I furnished a copy of the transcript to the participant for verification that his or her thoughts were accurately portrayed. My experiences, assumptions, and biases are openly catalogued within this dissertation. My

submersion and active engagement in the research situation is documented throughout the methodology section.

My dual roles as the teacher/researcher might also be seen as a limitation. At times, these roles did conflict. The biggest hurdle I had to overcome was the lack of time at school. While I acted as participant-observer in my own class, I was not always able to find the time to sit down and journal my hunches immediately. Leaving my computer on with my “random notes” page open, I was able to jot down random thoughts during slow moments. Also, arriving earlier to school and leaving later helped to effectively solve this problem. In addition to regularly scheduled meetings, inservice workshops, and parent conferences, emergencies occasionally took up time I had originally planned on using for reflection and journaling. I used longer reflection periods in these instances to piece together my earlier thoughts. My focus may have sporadically suffered as my time and energy was divided between the two roles as well. On occasion, I suspected that one or more of my student/participants might have been trying to please me with “the correct answers” to interview questions. I worked around this by triangulating multiple data sources, by asking certain types of questions in my interviews, and by getting to know my participants.

Conclusion

My readers are urged to construct their own meanings and interpretations of my research. Given this, a qualitative research method presented through case studies is ideal. There are two likely audiences that can benefit from my contribution: researchers and classroom teachers.

Researchers who read my study will likely view the contributions of my study from a theoretical perspective. Through the years, a large number of researchers have studied motivation. Oldfather's work (e.g. Oldfather, 1991; Oldfather, 1992; Oldfather, 1993; Oldfather & Dahl, 1995; Oldfather & McLaughlin, 1993; Oldfather & Wigfield, 1996) has had considerable influence upon my current epistemological stance, my conceptual framework, and the development of my research question. My current study, however, approaches motivation from a slightly different angle. Fundamentally, the data I have collected provide researchers with some unique qualitative variations that set it apart from the existing body of motivation literature. My study distinguishes itself by illustrating in-depth and meaningful data that have been derived from my participants' exclusive perceptions of motivating and non-motivating experiences as viewed through the lens of my conceptual framework. This study advances theory by offering researchers an alternative method (e.g. needs theories) for categorizing and analyzing the various facets of student motivation.

My hope is that teachers who read my case studies can recognize certain qualities in my participants that are similar to those in children they know or have known. The transference of my findings might be based upon the perception of who is reading it and how similar their experiences have been. In addition, my conceptual framework as described in the review of literature can serve as a bridge between theory and practice. It can provide teachers with a fresh perspective and a practical model through which they can view their classroom climate and its relationship with the other motivational concepts. Nicholls and Nolen (1995) theorize that useful research helps teachers to decide what they want to work toward and what sort of lives they would like to create in school.

Reading student perceptions of motivational concepts organized into thematic categories might encourage teachers to change their priorities, making student motivation more important to them while becoming more careful and methodical in their approach to motivating their students.

My study focuses upon understanding the nature of motivation among the students who participated in the study. The insights and conclusions that are illustrated have been derived from the perspective of the experts: the students. Though teachers should continue to respect their own common sense, the unveiling of the other dynamics (according to the students) that influence the cultural construction of their classrooms should not be overlooked. Students' perspectives of their surroundings play a crucial role in their choices to engage in learning or not to engage in learning. In these ways, I hope that my research will ring true to readers.

CHAPTER IV

JENNY

Introduction

Medium length brown hair, freckles, and a frequent nervous self-conscious laugh, Jenny is a bright and quiet girl. Judging from the outside, school seems to be a welcoming place for her. Jenny is an active participant in Broken Arrow Middle School's gifted program on a part-time basis. Her grades are mostly "A's" with a "B" or two mixed in on occasion. Her grades rank her in the top ten percent of her class of 377 eighth graders. Her almost constant smile adds to her appearance as a happy, easy-going thirteen-year old girl.

Grades seem to come fairly easy to Jenny, with only minor signs of a struggle in honors algebra and her gifted science class. Based upon her Iowa Algebra Aptitude Test (IAAT) scores and her performance during the seventh grade, Jenny's seventh grade math teacher recommended her to take the advanced math course in the eighth grade rather than the average introductory class. Her math score on the Iowa Algebra Aptitude test taken in the spring of seventh grade was a 161 out of a possible 199. Jenny's score exceeded the Broken Arrow's minimum cut-off criteria of 160 needed to become an eighth grade algebra student. Therefore, she has been tracked into the advanced algebra course for her eighth grade math class.

Given Jenny's gifted intelligence, her grades could likely be better with more effort. In class, Jenny appears attentive, but typically understated unless the opportunity

for group work or other interaction exists. She will participate in classroom discussions when called upon to do so, but does not usually volunteer. A popular child, Jenny is social with others, but usually surrounds herself with a few close friends. During the seventh grade and the early part of the eighth grade, Jenny had a relationship with her first boyfriend. Her extracurricular activities include playing in the school orchestra, football cheerleading and competitive swimming.

Jenny's Reasons for Learning

Jenny is laid back and seems to roll with the punches. Concentrating more on the social aspects of her life, she hasn't thought much about her concept of orientation to achievement. When I first asked her what she was trying to accomplish at school, she was a little perplexed. After sorting through her thoughts though, she explained herself.

Jenny: Well, I try to understand the things and I also try to get good grades because I want to be able to get into a good college and stuff.

John: So good grades are real important?

Jenny: Sometimes.

John: Okay. And understanding the material is important?

Jenny: Yeah.

John: Do you have one way or another than you feel is more important?

Jenny: I think they're both kind of important in different ways. I think understanding it is more important than the grade, but overall, like when you get into college and stuff, the grades are more important most of the time.

John: Okay. Are there times at school when understanding becomes more important and times at school when the other becomes more important?

Jenny: Sometimes, because in social studies I think understanding it is more important, but in math and stuff, grades can be important, maybe. I'm not sure.

Dweck (1989) identified two general concepts of orientation to achievement: learning orientation and performance orientation. Though triangulation of the data has shown her leaning slightly further in the direction of performance orientation, Jenny's orientation to achievement is solidly balanced between a learning orientation and a performance orientation. When a student approaches a task with a strong learning orientation, he or she tends to be more interested in understanding the subject, mastering the objectives of the curriculum, and learning something new. When a student tackles a goal with a strong performance orientation, he or she tends to focus on obtaining favorable judgments of their ability through such strategies as grades, praise, and peer recognition. Jenny shows evidence of both. During lessons when Jenny is trying to understand the material, she is showing evidence of learning orientation. Her ideas that grades are important in order to get in a good college shows that she also has a performance orientation.

Jenny does think beyond the present, but these thoughts are vague and slightly romanticized. I asked her if she had thought about the possibilities of a future career.

Jenny: Well, there's a lot of choices that I've thought about. I've thought being an orthodontist might be fun or a photographer or maybe a teacher. There's a bunch of them though.

Life is good for Jenny in the present. Her parents have provided her with a safe and nurturing environment, she does well in school without major struggles, and her social life is blossoming. Jenny's happy and privileged existence has insulated her from the harsh experiences others might call "reality." Her fortunate circumstances have

influenced her outlook in a number of ways. For one, Jenny focuses on her agreeable present, and without too much thought to how it might come to pass, fully expects the good life to continue into her adulthood.

Zoning on Autopilot

During my second interview with Jenny, we were discussing how she is able to maintain high grades in school while exerting inconsistent effort. Jenny coined an insightful phrase that she used to describe her state-of-mind during much of her days at school.

John: Do you need to put a lot of effort out in class?

Jenny: Sometimes. Most of the time. Because I have to usually take a lot of notes and stuff, even though I don't really go back and look at them. But I think writing it down helps me remember it.

John: What are you thinking about in class?

Jenny: Not much. I just kind of go on autopilot I guess. Just kind of write down stuff and I don't really think much about other things. Just kind of zone.

The term "autopilot" is intriguing. Though she has the ability to succeed in school while "zoning" on autopilot, Jenny's mind is clearly not actively engaged in thinking or making the connections necessary to learn. While on autopilot, she is simply doing what needs to be done to maintain her grades. Dweck (1989) would likely refer to this as evidence of performance orientation. Others (Fantuzzo, Rohrbeck, Hightower & Work, 1991) might cite this as evidence of how extrinsic factors (grades) can elicit temporary compliance but ineffective in helping children to become caring, responsible people or lifelong, self-directed learners. Day (1982) would argue that, in these situations, Jenny's interest has

not been aroused. The heightened awareness generated from arousal would likely help her to learn better.

Classroom Climate

Hidden Influence of Poor Student-Teacher Relationships

Jenny talks quite easily with adults, smiling and laughing often. Her pleasant demeanor, however, conceals some reservations that she has about school. Her quiet nature in class also belies these worries. At one point, Jenny told me about a math class where the teacher was particularly controlling. During this same conversation, she told me that she thought it was important for students to be allowed to talk in class.

John: Being able to talk in class, what do you mean by that?

Jenny: Like talk, socialize or—

John: Some classes you're able to; some classes you're not.

Jenny: I think it's better to be able to talk because if you don't understand something, you know, you can talk and ask them. That's what I do a lot with group work and stuff. Because most of the time I don't understand what I'm doing. Or just being able to talk, not necessarily while they're doing the lesson, but I just don't feel as uptight and stressed out when I can just say something. Even if it – I mean, not carry on a conversation, but just, I don't know, ask the person for paper without getting looked at like really kind of "Don't talk."

John: And in some classes you can't even ask for paper?

Jenny: Right.

John: And when you're in those kinds of classes, you know, let's think about learning for a second. You and I were talking about the surroundings. And what does that do to your learning surroundings? I mean—

Jenny: I learn, but I just don't like to. I don't want to do anything in those classes.

John: ...So why do you learn if you don't want to?

Jenny: Because I have to get a good grade. And I guess I just learn anyway just by listening and having to write down the stuff and doing it later in tests, homework.

The importance that Jenny places on being able to talk in class might be an indication that she prefers social constructivist teaching methods. Jenny's comments that "if you don't understand something...you can talk and ask [other students]" verifies her preference. In classes where Jenny is not overly confident in her abilities like math and science, Vygotsky's (1978) zone of proximal development comes into play. When Jenny is not comfortable with her abilities, she likes to seek the help of a more able peer to help her until she can be successful on her own. In classes where she perceives that she is powerless to seek help, she becomes anxious.

Jenny's perception that her math teacher was controlling is consistent with the findings of The Michigan Adolescence Study (Eccles, Wigfield, Midgley, Reuman, Mac Iver, and Feldlaufer, 1993). They found an increase in teacher control and a decrease in the quality of student/teacher relationships in the middle grades. They theorize that if middle grade students are simultaneously struggling with adolescence and teacher attitude while perceiving a hostile environment, they are not likely to be motivated to work to their potential. Van Hoose' (1991) contention that the relationship between teacher and student is crucial corresponds with Jenny's perception of her experiences.

She relates a sense of stress that is created by her perceived relationship with the teacher. The way she perceives her relationship with the teacher is actually shaped by the controlling climate of the classroom. The state anxiety described by Keller, Kelly, and Dodge (1978) occurs readily within Jenny when she perceives these conditions to be prevalent.

In response to my question, “Why do you learn if you don’t want to,” Jenny states “Because I have to get a good grade.” Her terminology during this excerpt leads me to the conclusion that when in this type of classroom climate, Jenny works exclusively in the performance orientation mode (Dweck, 1989), and is not highly motivated. While working “for a grade,” she is less motivated than she would be otherwise. This is again consistent with the findings of Fantuzzo, Rohrbeck, Hightower and Work (1991). Jenny’s willingness to complete her assignments in order to get the perceived rewards of “good grades” elicited her temporary compliance, but those same rewards had little impact on encouraging her to engage in learning.

Long-term Perceptions of Content Areas

Jenny’s negative perception of her former math teacher influenced her perception of the classroom climate. During one of our informal discussions, she told me that she actually dreaded going to this class. I followed up on this conversation during a taped interview.

John: Okay. Tell me about math.

Jenny: Math was really boring because we would have to sit there for two hours straight doing worksheets and we didn’t get to talk a lot or get in trouble. And she, if she

talks, it wasn't very much. So most of the time it was just work out of the book or worksheets.

John: So you were afraid of getting in trouble.

Jenny: Yeah.

John: So you were afraid of getting in trouble in math.

Jenny: Yes. Because she would be kind of – she was kind of mean, I guess. Most of time, when she yelled, she would yell really loud and stuff and we were scared of her.

John: So the kids were afraid.

Jenny: Yeah.

John: And how did that influence your feeling about that class?

Jenny: I didn't like that class at all.

John: Did that influence your feeling about the subject at all?

Jenny: Yeah. I don't like math. Mostly, just the teachers over all. I don't like math teachers. I don't know why though.

Her dislike for the subject has influenced her feelings for the present teacher, and her dislike for the teacher increased her dislike for the subject. After Jenny's comments about math teachers in general, I wondered if she would soften her stance. When she reviewed the transcripts later during a member-check, she left the comments untouched. When she returned them to me, I asked her further about it, and she stiffened her resolve. Jenny told me that she couldn't understand why anybody would ever want to be a math teacher.

Jenny's mother currently teaches science, but has taught math in the past. In attempt to triangulate the data, I asked her about her mother.

Jenny: My mother isn't really a math teacher. I mean, she doesn't act like a math teacher or anything. She just got stuck teaching it for a couple of years. I mean, she's a science teacher, so I don't think that she's like that.

Her response showed that perception is very powerful. It might be evidence of Piaget's (1967) concept of adaptation. The question I posed to Jenny seemed to cause cognitive conflict. A discrepancy arose between what she stated she believes and what she perceived she has experienced. She seemed to quickly search for equilibrium through assimilation and accommodation. I surmised that Jenny might have been trying to assimilate my comments into already existing cognitive structures, but found them lacking. Therefore, her mind appeared to enter into the accommodation mode. It is possible that she formed additional structures within the organization of her mind because her opinions about math teachers in general had never been challenged, and didn't fit with her existing opinion about her mother. Piaget might say that she accommodated her conflicting perceptions by coming to the conclusion that her mother "isn't really a math teacher."

Positive Student-Teacher Relationships

To Jenny, the relationship between the teacher and his or her students is an important part of the classroom climate. She stated that my social studies class was her favorite one during the current year. Jenny indicated that a major part of her fondness for my class was the manner in which I talk to the students.

Jenny: Social studies is my favorite class because you talk to us a lot...

John: When you say I talk to you, can I go back to that a little bit?

Jenny: Uh huh.

John: But when you said I talk to you, is there a certain way that I do that that makes you feel different ways than the way other people might talk to you?

Jenny: Well, you talk to us like...you aren't like a higher level above us. You aren't superior, as superior than some people. And you joke around with us and stuff like that.

John: Okay. And how does that influence the way you feel while you're in the classroom?

Jenny: Well, it makes me like the class and it makes me just feel more relaxed and I don't feel like I'm going to get in trouble so I feel that I can just be, I don't know, relaxed.

John: You enjoy being relaxed in class?

Jenny: Yeah.

Jenny's is describing the respect feature of Oldfather's (1993) "honored voice" concept within the classroom climate and how it influences her attitude. Goodenow (1991) believes that, if my students perceive that their participation is valued, it will lead to a sense of belonging. Goodenow calls this sense of belonging situation-specific. Jenny's comments are consistent with this idea. They provide evidence that she perceives a strong sense of belonging in one classroom, and just as strong a sense of alienation in another.

Climate and Learning

Jenny spoke ill of classroom climate that she perceived to be negative, and glowingly of classroom climate she considered to be positive. I wanted to know how the climate of a classroom influences Jenny's ability to learn.

John: So, you know, you mentioned being relaxed and you've also mentioned being stressed.

Jenny: Right.

John: What does that do to your learning?

Jenny: Well, when I'm relaxed, I guess I feel like I can learn better and I remember more. But when I'm stressed out, I usually just kind of think of – understand it for a little while. But then after I've taken the test or done the homework, I usually forget about it and don't really go back to it. It just makes it easier to remember and stuff.

John: When you're in a classroom where you're afraid of getting in trouble or those kinds of things, and you compare that to a classroom where you're relaxed and whatever, which one is easier to go on autopilot?

Jenny: Most of the time the stressed out class because I guess I get bored and I just kind of sit there like this. [she stared straight ahead for approximately three seconds, tilting her head slightly, eyes glazing over] But I'm thinking about other things and kind of zoning out. But it looks like I'm paying attention until they call on me.

John: Okay. And then?

Jenny: And then I'm like, "Um." And I start to laugh because I have no clue. And then the teachers get mad. But that's okay.

The climate of the classroom influences Jenny's perception of the learning environment. When Jenny gets stressed out, she disengages, or mentally turns-off. This is consistent with Small, Dodge, and Jiang's (1996) assertion that anxiety is counter-productive to

student motivation. When anxiety strikes, Jenny goes on autopilot and mentally checks out. When this occurs, she becomes disinterested, and eventually bored. Small, et al., claim that boredom is the other reason a student might become unmotivated in school. In Jenny's case, one might often lead to the other. This boredom and disengagement together sometimes lead to Jenny's lack of understanding, which, coupled with the possibility of being called upon to answer questions in the class, may lead to more fear, and more stress.

Jenny's fear might also relate to the "needs" category. It could be considered an element of the safety/security level of Maslow's (1943) hierarchy of needs. Maslow theorized that lower needs must be satisfied before people may work to satisfy higher needs. He might argue that, in Jenny's case, a stressful classroom climate makes it more difficult for her to adjust to a higher level where her attention might be aroused, leading to active engagement in learning. I will probe deeper into her fears and their effects on her motivation to engage in learning during the next section.

Jenny's perceptions of each classroom's climate and how she fits within each classroom climate are sweeping in their importance. These perceptions are influential to her situational classroom needs, her situational classroom self-efficacy, her perception of the content value, and to her interest in what she perceives a particular class might have to offer.

Perceived Student Needs

Fear

Jenny talks often of her worries and fears in school. While I probed for other influences on her motivation during our interviews, Jenny repeatedly returned to her

fears. Though many of her fears are situational and are undoubtedly a product of specific classroom climates created by her perceptions of her individual teachers, others are not.

These are clearly embedded within the student needs category.

John: Okay. Tell me, if there were no such thing as grades, what would you do in school?

Jenny: I probably wouldn't do as much, I guess. I mean, I'd probably still do some, but I probably wouldn't worry as much as about tests and things like that.

John: And you do worry about tests.

Jenny: Yes.

John: What kinds of worries do you have?

Jenny: I don't think I take tests very good because I know the stuff, but usually I forget it from the night that I studied and never have to do it. I don't like doing the essay questions. And I'm just afraid that I'm going to fail the tests because they're worth a lot of points and a lot of your grade.

John: So if there were no such thing as grades, how would that change the way that you studied?

Jenny: I probably wouldn't study as much. I still don't study a lot.

Jenny says that her fear of failure motivates her to study for tests. There is also contradictory evidence to this statement. Jenny's last comment in this excerpt that "I still don't study a lot" is more consistent with my observations. She does in fact fear failure, and will study a minimal amount of time in order to eradicate this possibility. Learning is not necessarily an objective or a consequence.

Failure and/or the consequences of failure are perceived by Jenny as punishment. Punishment for failing to learn something can be considered an extrinsic factor. This is consistent with Kohn's (1993a) implication that extrinsic motivation inhibits performance. He claims that the usage of extrinsic motivators in the classroom is grounded in the concept that learning is somehow unpleasant. Jenny's weak and minimal efforts that are based on her attempts to avoid failure and punishment do not lead to real learning. Kohn would probably use this as an example that extrinsic rewards are undermining. He might also say that if Jenny were intrinsically motivated, she would be more likely to actively engage in learning.

The Need for Equilibrium

Using Jenny's own terminology, I probed deeper into her lack-of-engagement in school. In classes where Jenny is not engaged in an activity, "autopilot" is her state of equilibrium (Hull, 1934). Interaction was one way of taking her away from that comfortable, albeit non-effective state. Her fear of being called on while she was zoning out tends to keep her on her toes.

John: Tell me about some of the times that you're actually not on autopilot, where you're doing more than just cruising.

Jenny: Probably like when the teachers ask questions. Then I kind of have to start paying attention most of the time and actually think about it. Because I'm afraid that they'll call on me.

Jenny is afraid that she will be called upon in some situations, and is therefore more likely to try to avoid embarrassment. She claims that she does this by coming off autopilot and engages her mind. Jenny's statements would lead a reader to believe that

she is somehow motivated to remove herself from autopilot (and engage in the activity) due to fears that she will be called upon and subsequently embarrassed by appearing ignorant.

On the other hand, Jenny's perception that she is kept on her toes by the fear that she will be called upon to answer a question conflicts with other statements she made. It was my position that it was important to know more about Jenny's unmitigated statements about math teachers. Her statements revealed more about her inclination to mentally disengage in classes she dislikes.

John: Okay. Tell me about math teachers.

Jenny: Well, I don't think that they do a lot of interesting things. I think they just do problems out of the book and can't really make math fun, I guess. So most of the time they aren't very creative. They yell a lot. I don't know. Maybe it's just the math teachers I've had. But I always seem to get in trouble more in those classes.

John: You worry a lot about getting in trouble.

Jenny: Yeah.

John: So what kind of trouble are you talking about here?

Jenny: Being embarrassed in front of the class. Like when they say your name, just yell it out, "Wake up" or something. It's just kind of embarrassing.

John: And this happens more in math?

Jenny: Yeah. Probably because I'm falling asleep. So I get yelled up to wake up a lot.

If Jenny's fear of embarrassment was strong enough to keep her attention focused upon the assignment, then why is she always "falling asleep" in math? The fear she experiences is not a productive emotion. In a class where she feels this way, she is likely

to view the class in a negative sense, leading her to “fall asleep,” or go on “autopilot.” In addition, Jenny’s comments that math teachers “yell a lot” might lead her to believe that they will yell no matter what she does. This might reflect qualities of the “locus of control” category. Since Jenny perceives that the teacher’s penchant for yelling is not influenced by Jenny’s own actions, then she consistently retreats to the “autopilot” phase.

Jenny mentions that math teachers “aren’t very creative.” This statement also reflects qualities of the “student interest” category, hinting that her engagement might be stronger if the teacher were more creative in the lessons. Glasser (1986) though, considers having fun in school to be one of the most important needs. Following his control theory, since Jenny’s needs are not being met, she will pay very little attention in math.

Overall, the tone of Jenny’s statements indicates that she has a strong need for mutual respect. This is consistent with Scales’ (1991) position that adolescent students have a need for positive social interaction with adults and peers. For Jenny, her perception of math has been overtaken by a vicious cycle. In her mind, math is a boring subject that attracts nasty and non-creative teachers, leading her to dislike the subject. Her perception of these teachers leads to a dislike of the subject. The dislike of the subject leads to situations that exacerbate the relationship between her and the teachers.

Group Work

During an early interview Jenny told me that she liked group work. She told me that it helped her learn better and because it was a good method for getting away with socializing in school. Jenny’s enjoyment of group work suggests that her desire for positive social interaction with peers is consistent with Scales’ (1991) position. Seeking

to understand further about why she liked group work and how it influenced her, I probed during a later interview.

John: You told me before that you like to socialize.

Jenny: Yeah.

John: And I'd like to know a little bit more about what kinds of group work might help you to learn better.

Jenny: Well, I think if you're able to socialize, you're more relaxed. And even though sometimes when I do group work I talk about other things, but I also am able to finish the work. And I guess it just makes it easier to finish it because you're able to talk about it. And it just makes you more relaxed and stuff.

Jenny's comments that group work "just makes it easier...because you're able to talk about it" is an example of social constructivism. For Jenny, talking about an issue under study helps her engage by not only meeting her social needs (Scales, 1991), but also by placing her in position to work cooperatively with others to construct knowledge. In order for her to construct her own knowledge, Jenny needs to be motivated to think. While on autopilot, she is not motivated to think.

Her comments that "it [group work] just makes you more relaxed" is an example of how group work meets Jenny's personal needs. It takes away her fear of getting in trouble and the stress that goes along with it. Maslow (1949) would likely argue that Jenny needs to feel "safe" in her learning environment before she is able to move up the pyramid of needs. The opportunity to work within a group frees Jenny from some of her fears (e.g. getting in trouble for talking, a yelling teacher, embarrassment), opening her up to the possibility of thinking and discussing academic issues.

Jenny's willingness to engage in cooperative learning is consistent with Fosnot's (1996) definition of learning:

“a process of struggling with the conflict between existing personal models of the world and discrepant new insights, constructing new representations and models of reality as a human meaning-making venture with culturally developed tools and symbols . . . through cooperative social activity, discourse, and debate.” (p. ix)

In his social-developmental model of higher order thinking, Scheurman (1995) states that personal epistemology interacts with social contextual factors to influence reasoning performance. Cooperative learning creates social contextual factors, albeit artificial ones, which are helpful in creating Jenny's desire and willingness to learn.

Unintended Consequences of Group Work

When Jenny commented that, “sometimes when I do group work I talk about other things,” it was reminiscent of some experiences I have had as well as stories I have heard colleagues tell. My experiences with group work have been mostly positive, but Jenny's comments might signal that not all group work she has participated in was productive. I asked her to tell me more about this.

John: Do you think that sometimes the other stuff that you talked about maybe overtakes?

Jenny: Sometimes, but not all the time. Because, I mean, if you have a smart person in the group, usually it does. But if all of you are kind of on the same level, then usually it doesn't.

John: What happens when you have a smart person in the group?

Jenny: They end up doing all the work. Because we were doing a lab the other day and we had a kid that was genius and so me and my friend, we just talked while he did most of the work. And we're like, "Wait a minute. I don't understand it." He kind of acted like we were stupid because we didn't understand it.

John: Did he explain the stuff to you?

Jenny: Not really. He just kind of gave us the answers to the questions. So he didn't explain why or anything. That just made us really confused because he used big words.

Jenny's comments that, "me and my friend, we just talked while he [the genius] did most of the work" confirmed my suspicion that, though she claims to like group work, sometimes it was an inefficient way for her to learn. In addition, it did not always motivate her to engage in active learning. VanSickle (1992) maintains that there are some general conditions under which teachers can reasonably expect their students to engage in productive, cooperative work. In a research synthesis on cooperative learning, Slavin (1991a) indicates that two key elements for successful cooperative learning are group goals and individual accountability. Jenny blames the "genius" in the group for her lack of effort, but that is not likely the reason. While group goals were evident in this activity, the absence of individual accountability was most likely the reason Jenny and her friend were not engaged.

How individual accountability is satisfied (or rewarded) through group goals has become another hot point in the intrinsic-extrinsic debate. Whereas Slavin (1987, 1991a, 1991b) is an advocate for using extrinsic group rewards to reward individual learning, Kohn (1991a, 1991b) is unyielding in his repudiation of extrinsic rewards. Slavin (1991b)

argues that without group rewards for individual learning, cooperative learning might be reduced to answer sharing. Kohn (1991a, 1991b) disagrees, maintaining that research indicates the opposite: extrinsic rewards are ineffective, and possibly damaging to student motivation. He asserts that suitable content, autonomy, and relationship components are the cornerstone of student motivation in cooperative groups. Either way, group and individual accountability are critical for Jenny. Simple group work is not necessarily the panacea for all of her motivational issues.

Jenny's evaluation of the "genius" that confused the other members of the group by using "big words" might also cross the border into student efficacy. Jenny's assessment of the group dynamics illustrates one reason why strategic grouping might be just as critical as other issues when planning for cooperative learning activities. This example presents an interesting twist to group work, since Jenny often talks about the positive effect that group work has on her ability to understand the content. It is also a significant reminder for teachers to attempt to help students make sense of the material by talking in the students' language—and not to confuse them with complicated adult terminologies. In this way, Jenny's comments segue nicely into the next category.

Locus of Control-Student Efficacy

When asked how a very difficult lesson influences her effort, Jenny became agitated, and started pulling at her fingers. She appeared uncertain about how she wanted to answer the question. She paused, talking slowly at first, then finished in a frenzied rush.

Jenny: Sometimes I don't work as hard at it because usually if I don't understand it the first time, I figure I probably won't understand it. So I work hard to a point until I just get so confused that I can't really do anything.

When Jenny says that, "I figure I probably won't understand it," she is indicating that she perceives little chance of success, and understanding it is beyond her locus of control.

Her comment that she "won't work as hard," is consistent with Keller, Kelly, and Dodge (1978), who claim that students who perceive the results of a situation as out of their control are less likely to engage in the activity.

Social Constructivism

Jenny's nervous outlook surfaces again during her another conversation about her enjoyment of group work. Though understanding of most subject matter comes easily for her, Jenny worries about understanding more challenging content.

John: What about group work do you like?

Jenny: You get to socialize more and if you don't get something, your friends can help you understand it.

While in a quiet classroom that has no chance for interaction, Jenny feels like she is on an island. If she is not able to grasp the meaning of what she is learning, she is left alone with her own thoughts. Partly due to her hesitation to ask questions in class, Jenny is left to wait until later. Vygotsky (1978, 1986) maintains that humans learn through social interaction. Jenny's comments are social constructivist in nature. She prefers to learn through socialization with others. The active nature of a productive cooperative learning activity is a motivating influence on Jenny. Left alone to her own thoughts, an anxious Jenny is likely to go on autopilot.

Later, I had an opportunity to probe deeper into why Jenny liked working in groups. While discussing her frustration with difficult work, I asked her about whether working in groups might be helpful.

Jenny: I think that that's better because you can have more people to think and if you don't understand it, you can – they can help you understand. Like usually one person in the group will get it and they can usually help the other people or you can work on it together to understand it.

Whereas social constructivism is at play in both of the excerpts above, Jenny gets more specific about Vygotsky's (1978, 1986) Zone of Proximal Development in the second one. During the learning phase, Jenny's perception that an assignment is difficult might turn her off if it is set up as an individual assignment. In a cooperative learning situation, though, Jenny perceives that understanding it is only a matter of time. The "one person" in the group who understands "it" and shares with the others is Vygotsky's competent peer who helps the others along through the Zone of Proximal Development until they can handle the work on their own. Jenny expressed to me later that she feels a personal sense of accomplishment when she plays the role of the competent peer.

Easy Work

Jenny inferred earlier that she liked easy assignments because she appreciates being able to understand them. On the other hand, she told me that she perceived them as "boring" and unimportant. I had been receiving mixed signals in regards to "easy" assignments, so I probed the issue.

John: Is being easy important?

Jenny: Sometimes. Sometimes it has to be hard, otherwise you'll forget it. But when it's easy, it's – sometimes you don't put as much work into it when it's easy though.

But I like easy work better.

The mixed signals Jenny is sending were confusing to me at first. As I read the transcripts of my follow up questions, I became more befuddled. Then it came to me. What did Jenny mean by “easy?” During an informal follow-up conversation, I asked her what an easy assignment was, and she told me that there are different kinds. In other words, her definition fluctuates. She considers all assignments that she understands to be “easy,” but qualified that there are assignments that are “too easy.” These are the ones that she doesn't put as much effort into. She called them “baby assignments.” Assignments that are too easy for Jenny influence her perception of their value along with her interest in engaging in learning.

Knowing what her definition of an easy assignment was, her later transcripts began to make more sense. Her inconsistent comments concerning the ease and difficulty of certain assignments are more understandable by differentiating between “easy assignments” and “baby assignments.”

John: You've already kind of talked a little bit about easy lessons, but what did you mean by saying that easy lessons, you like them but, you know, what do you do with an easy lesson?

Jenny: Just write down whatever answer comes in my head first, or the right answer.

Usually they have right or wrong answers.

John: Uh huh.

Jenny: So you usually don't really have to think as much for easy things. But easy lessons are also kind of boring because you don't really do anything. You already know it and stuff.

Jenny's comments that, "they [easy work] usually have right or wrong answers" is consistent with the lowest level of the Taxonomy of Educational Objectives for the cognitive domain set forth by Bloom, Englehart, Hill, Furst, and Krathwohl (1956). There are six levels to the taxonomy of objectives ranging from the knowledge level (simplest) to the evaluation level (most complex). The level of an objective refers to the cognitive, mental, or thought complexity required for completing the objective. The levels are:

- Knowledge is the remembering (recalling) of appropriate, previously learned information.
- Comprehension is grasping (understanding) the meaning of informational materials.
- Application is the use of previously learned information in new and concrete situations to solve problems that have single or best answers.
- Analysis is the breaking down of informational materials into their component parts, examining (and trying to understand the organizational structure of) such information to develop divergent conclusions by identifying motives or causes, making inferences, and/or finding evidence to support generalizations.
- Synthesis is defined as creatively or divergently applying prior knowledge and skills to produce a new or original whole.

- Evaluation is judging the value of material based on personal values/opinions, resulting in an end product, with a given purpose, without real right or wrong answers.

The easy assignments described above by Jenny are knowledge based (Bloom, Englehart, Hill, Furst, & Krathwohl, 1956). They require little in the way of thinking, and can easily be completed by Jenny while she is cruising on autopilot. Wigfield, Eccles, and Pintrich (1996) assert that adolescent children are going through, “the increasing ability to think abstractly, to consider the hypothetical as well as the real, to engage in more sophisticated and elaborate information processing-strategies, to consider multiple dimensions of a problem at once, and to reflect on oneself and on complicated problems (p. 151).”

Knowledge based assignments require almost none of these newfound abilities, and do not provide students with opportunities to practice them. This is consistent with the observations of Eccles, et al. (1993). They found that the intellectual level of the content taught in traditional seventh grade classrooms was often lower than the intellectual level of content taught in elementary school classrooms. They theorized that this leads to the decrease in academic engagement of some students. Unless there is another reason for Jenny to become engaged in this type of lesson such as interest in the topic, their overly simplistic nature will likely lead her to become unmotivated.

Not Too Easy, Not Too Difficult

Jenny has expressed an uneasy feeling for assignments that are too difficult, while expressing a lack of desire to engage in assignments that are too easy. I followed up our discussion by asking some outright questions concerning her learning while partaking in easy and difficult assignments.

John: Do easy lessons lead to learning?

Jenny: No, not really.

John: How about difficult lessons?

Jenny: Usually those do because you have to think and understand it and you have to learn before you can understand it.

Jenny's comments that, "you have to think [about a difficult lesson]" is indicative of engagement. Dewey (1916) would agree. He maintains that thinking itself is an experience, and that no meaningful experience is possible without thought.

"Understanding" a concept is a form of comprehension (Jenny is speaking of comprehension (Bloom, Englehart, Hill, Furst, & Krathwohl, 1956) By synthesizing these answers with some of the other comments she has made, I concluded that she places more value on understanding content than she is aware of. Considering that she feels that she is not learning anything new during "baby" assignments, it is no wonder she puts forth little effort. This is consistent with the position of Csikszentmihalyi (1975), who asserts that motivation to accomplish something is based upon the optimal challenge. A person's motivation will be highest when an activity is not too easy or too difficult. For Jenny, difficult lessons can lead to learning only when she chooses to engage.

Understanding

Jenny talks later about a situation from a previous school-year when she was frustrated with the teaching methods. She related how she felt pressure in the subject.

Jenny: And in math we do a lot of book work and a lot of writing and doing math problems...like, right after, one after another. We don't get a lot of time to just sit or work on, try to understanding it.

Her frustration stems from the methods employed by the teacher and is exacerbated by the quick pace. In this case, Jenny wanted to engage in learning, but the way the lessons were set up, she was not given the chance. Jenny was seeking an opportunity to apply, and maybe synthesize her newfound skills. It would have been beneficial to Jenny's short-term and long-term motivation (in math) if the teacher had thought out her teaching objectives in advance, and given students an opportunity to perform in the application or synthesis level (Bloom, Englehart, Hill, Furst, & Krathwohl, 1956). The lack of this opportunity was one more reason Jenny might perceive that this math was outside her locus of control. Work that Jenny perceives is beyond her control lowers the degree of her willingness to engage.

Difficulty and Perceived Value

Our state legislature passed new laws requiring middle schools to teach students for an additional 30 minutes, while the local district added an extra ten minutes to the school day. During the current school-year, our school chose to create a new 40-minute period in the morning called, "academic enrichment." Student schedules are on a rotating basis. Most of them attend each of their academic classes for an additional 40 minutes each week, while others like at-risk and special education students are placed in academic enrichment based upon their special needs. Because the special needs students are enrolled in separate classes, teachers need to be creative with the content that is taught during academic enrichment. It cannot be based upon material crucial to the class, otherwise the special needs students not be exposed to it. Most teachers choose to extend, enrich, and/or enhance the basic curriculum. Jenny talks about one of the lessons in her gifted science academic enrichment class.

John: Have you been able to think of any specific things that you would like to talk about? Maybe a specific lesson or two that's really good, really bad?

Jenny: We've been doing these math things. I don't know if I've mentioned them yet.

But these math worksheets in the science enrichment. And they're really hard to understand. I don't think they're on our level of math. And it's twenty questions and most of the time we only get four or five of them right. And I think it's a waste of time, too, but it's also just so hard and I don't like doing those kind of things. I don't like doing stuff that makes me feel stupid because I don't get it.

John: Okay. You just – you were talking about four or five questions out of twenty.

Jenny: Yeah.

John: And how much effort do the kids put into that?

Jenny: Usually some. But usually I just skip over ones. Like if it seems easy, then I'll do it. But if it's got some big word that I have no clue, I don't try to understand it and just kind of skip around. And then once I've finished all the easy ones, sometimes I go back to the harder ones. But usually I don't. I just kind of act like I'm doing something.

John: So why do you just – why do you blow those off? I mean—

Jenny: Because I think if I don't understand it and she's not going to explain it, I don't think that it's really a purpose. And there's no reason to try to do it. If you don't understand it there's nothing you can really do about it.

The level or degree that Jenny chooses to employ in her engagement in an assignment is usually influenced by more than one factor. In this case, Jenny was clearly influenced by the perceived difficulty of the math questions. She claimed to do the few that she could,

then pretend to work on the others. During one of my observations, I noticed Jenny feigning work. By spending her energy on appearances rather than engagement in learning, she has become quite proficient. Jenny's comments that, "If you don't understand it there's nothing you can really do about it" go along with her admission that she pretended to work instead of putting forth stronger effort is consistent with Keller, Kelly, and Dodge (1978), who claim that if a person perceives the result of a situation as a foregone conclusion, they will put forth little or no effort. Jenny's actions confirmed this.

While probing this line of questioning, I sensed that Jenny had begun to talk about the classroom climate. Remembering her "fear" of asking questions in class, I responded to her thoughts that, "there's nothing you can really do about it" by suggesting that she could ask questions. Her answer was not about classroom climate, but instead about her perceived idea of the importance of the assignment.

John: How about ask questions?

Jenny: But see, they're kind of not really – it's not really a class. They just hand out worksheets and you do it the whole time. So there's not – she won't really answer your question. And it's not for a grade really. It's just kind of extra points maybe.

I'm not sure how she adds it all up.

John: Is that important?

Jenny: I don't think they're that important, so I don't spend a lot of time trying to do it.

John: No, the fact that she doesn't – you're not even sure how these things factor into your grades. Is that important?

Jenny: No. Because if I don't know how – I don't think it costs that much -- I mean, not costs. I don't think that it really brings up or down your grade any. So I guess if it was a big part of it, then I'd probably try to spend more time on it. But I don't.

The interplay between the difficulty of the assignment and Jenny's perceived value of the assignment is important to note. If Jenny had perceived that the assignments were "worth more," she might have taken more of an interest in completing them. That was not the case. She was utterly confused by the overall difficulty of the assignment (seeing the possibility of successful completion of the assignment as controlled externally), unclear as to the extrinsic value (amount it was worth in points toward her grade), and very clear as to lack of intrinsic value in the assignment. Therefore, Jenny put forth very little effort and the assignment remained incomplete.

Relevance-Content Value

Originally, I was seeking data that might provide me with evidence of how the relevance of the content being taught in school either motivates or does not motivate Jenny. I found that she is not overtly aware of any deep outside relevance concerning school-based content.

John: What will you use after you leave school that you're learning while you're in school?

Jenny: Probably the language arts the most. And a little bit of math, but I think that most of the math that we learned a long time ago is what I'll probably use more than what we're learning now, because I don't see how equations could help you with what you're going to be using in the future. And maybe a little bit of science, but not as much. So probably mostly language arts.

John: Okay. What aspects of language arts?

Jenny: Probably spelling and stuff because you have to write a lot of papers in high school and college and probably the vocabulary.

John: How about beyond college?

Jenny: Yeah, you'll probably use a lot of vocabulary and stuff after college. It depends on what jobs you have, I guess, depending on what you use. Because you might need a lot of the punctuation and grammar and things like that if you have a writing job, like in the newspaper or something.

Jenny's comments show a rudimentary understanding of how basic skills might help her in her life outside of school, but little else. For Jenny, it might be helpful for her teachers to follow Hootstein's (1994) recommendation that teachers make the intended value of learning unambiguous to their students.

Long-term Relevance

I probed deeper into how Jenny perceives the value of the content she learns in school. This is a concept that she seemed to struggle with.

John: Tell me about things that are important that you're learning. The actual content and what makes it important.

Jenny: Like a lesson that we've been learning?

John: Anything. Sure.

Jenny: Well, I'm not really sure if anything important that we're learning right now. Maybe the Constitution. I guess that's kind of important because if you got arrested or something, you might want to know your rights. So I guess that's pretty important, to know your rights and things like that.

Jenny's perception of her future plans do not include even the remote possibility of being arrested. In fact, her perception of the long-term relevance of material had little to do with her motivation to engage in understanding the lessons teachers prepared for her in school during the present.

Jenny does not think much about the future. When she does, her vision tends to lack details. In fact, her career plans and her present motivation were almost completely at odds.

John: One of the career ideas that you gave me – what was the first one that you said again?

Jenny: Orthodontist.

John: Okay. Do you understand what an orthodontist has to go through?

Jenny: Lots of school.

John: And lots of—

Jenny: Math

John: Uh huh. Does that, is that going to influence your career choice?

Jenny: I'm not sure.

John: Have you done any thinking about that?

Jenny: No, not really.

John: I'm not trying to—

Jenny: Kind of. I thought of about, I thought being an architect would fun, but then I thought about the math that you have to do and I was like, no. I think I'm going to scratch out that idea. So, I don't know. I probably wouldn't go into that. So I'll probably do something that wouldn't take as much math skills just because I don't

think they're very fun and it takes a long time to do most of it, because it has lots of steps to it and stuff.

While this exchange was occurring, Jenny's romanticized version of the future collided with her current perception of math. Jenny shared a number of possible career choices with me. Most of them will require a math/science background. Though she was not willing to count most of them out (except maybe architecture), she unwillingly acknowledged that a discrepancy did exist between her long-term career choice and her perception of how important the current math might be. Regardless, she continued to insist that the algebra she was learning is useless.

Teaching Methods

Jenny also discussed her perception of the relevance of math and science. During this exchange, her tone was faintly sarcastic and mocking. Uncomfortable with sharing her negative way of thinking, she giggled nervously as she opened up and described her inner feelings about the content in her science and math classes.

Jenny: But in science, it's just weather patterns. I mean, I guess that's kind of important to understand, but not really. I mean...[Jenny gestured toward the window] Go stick your head out the window and see what the weather's going to be like for the day. So I don't see how that's really important.

John: So you're just going to rely on somebody else to tell you what the weather is?

Jenny: Yeah.

Jenny's perception of the weather lesson as unimportant is grounded in more than her perception of its value. Earlier Jenny had described the weather lesson, and in actuality, she had been describing a lesson that she had difficulty understanding.

John: So when you were not understanding the science lesson today, what kind of lesson was it? Although it was about weather patterns, what kind of lesson did you do in order to learn the material?

Jenny: Well, she was reading it off a paper and it was also on an overhead. And then we were also doing a worksheet with it and answering questions. It was stuff about like what does this mean and stuff like that. If it's pointing this direction, what does that mean?

Though it seems like a difficult task to make a case that weather is irrelevant, Jenny's attitude toward the teaching methods made it much easier for her. Her lack of desire to learn about it was powerful. Her secondary comments about the teaching methods such as reading off a paper, the overhead, or worksheets revealed the reasons for her disdain.

Keller's (1983) argument that a student's perception of the relevance of material comes from the way the material is taught fits with Jenny's assessment of this assignment. Jenny told me later that she had been bored, and had put herself on "autopilot" during the early part of this science lesson. Too late, she realized that she was having trouble understanding what she was expected to know. During the middle of the weather lesson, Jenny's anxious desperation led to effort to complete the assignment. Shaking her head and rolling her eyes, she communicated that she was able to finish her worksheet without truly understanding the concept.

Though I already suspected the answer, I waited a week and asked Jenny if she had followed up the lesson on her own and tried to understand the concept that she missed that day. Her answer came in the form of a laugh. Her perception that the lesson lacked value led to her decision to avoid following it up and trying to make sense of it.

A Waste of Time

Jenny's perception of algebra's lack of relevance is intense. She spoke of content in school (especially in math) on numerous occasions as a "waste of time." Normally quiet and subdued, asking her about this brought some important issues to the forefront. Sitting forward in her seat, she took an aggressive posture. She talked fast and furious while moving her hands about to emphasize her points.

John: Okay. Tell me about the stuff that you – and it doesn't have to be right now; it can be anything, at any point, just figuring your middle school years or whatever – but things that you consider to be a waste of time.

Jenny: Most of the time things that I don't see how have anything to do with what we're learning. Like in math, I don't see how plotting points on a graph has anything to do with what we're going to be using in the future. And just things like that. In science, learning about rocks. I don't see how that has anything to do with anything. I guess just to learn it. I don't know.

John: So those are a waste of time.

Jenny: Yeah.

John: And when you see assignments that are a waste of time, if they're assignments you understand or whatever, how does this deal with – how do you deal with this cruise control, autopilot, what?

Jenny: Well, usually I just write down something really quick and get it over with real fast and do something else.

John: How about assignments that are worthwhile, something you feel like you should know and you're learning new information?

Jenny: Then I usually spend more time on it and re-read it or do something to help me understand what I'm doing.

Lessons that Jenny regards as a waste of time are lessons that she considers to have little value to them. She deals with this by getting through the lessons without too much thinking. Her comment "usually I just write down something really quick and get it over with real fast and do something else" is evidence of a lack of engagement. This is consistent with Brophy's (1982) position that students must be engaged in meaningful tasks for efficient learning to take place. Jenny struggled more in math and science than she did elsewhere. Her learning could easily have been more efficient if she was completely engaged. During moments like this, troubled students turn off and refuse to complete assignments. Jenny's perception of the content value was clearly influenced by her perception of the climate of the classroom and her relationship with the teacher.

Student Interest vs. Disinterest

Block Schedule

During Jenny's seventh grade year, her team was on an alternating day block schedule (Armiger, 1996). Rather than attending four academic classes for one hour each day, Jenny attended two academic classes for approximately two hours. Her feelings about the block schedule were mixed. She disliked the two-hour block in math class.

Jenny: Okay. Last year we had block scheduling, so we would go to only two classes a day, plus our Exploratories. And sometimes the classes got boring, like math.

John: Okay. Tell me about math.

Jenny: Math was really boring because we would have to sit there for two hours straight doing worksheets and we didn't get to talk a lot or get in trouble. And she, if she

talks, it wasn't very much. So most of the time it was just work out of the book or worksheets.

The lack of variation in the types of lessons turned Jenny off to the subject. This is consistent with Hackmann and Schmitt's (1997) recommendations that teachers use multiple ways to teach new information during block scheduling. Jenny indicated that she did enjoy the block schedule in her other classes. Variation of lesson types was an important factor in her assessment.

Jenny: But other classes, they were fun because we'd do a lot of different things.

John: Now, what are some of the different things that you did in these classes that made it not boring?

Jenny: Well, we would usually get to work in groups and we would watch a video or work on maps. This was usually in social studies that it was the most fun because I had most of my friends in those classes and we did a lot of group work.

John: So group work?

Jenny: Yes.

John: What about group work do you like?

Jenny: You get to socialize more and if you don't get something, your friends can help you understand it.

Salvaterra & Adams (1996) claim that the flexibility generated by block scheduling can be used to help place the teacher in the role of facilitator as opposed to lecturer, leading to more creative instructional methodology, allowing for teamwork to develop. In the classes that she enjoyed the block schedule, these characteristics were present. It was not

the block schedule then, that increased Jenny's enjoyment, but the climate of the classes and the subsequent types of lessons employed by the teacher.

Taking Notes

Jenny is in the gifted science class, where the learning is supposed to transpire in creative ways. Jenny does not perceive it that way. Her science teacher attempts to rush through a great amount of content. Taking notes and passively listening to the teacher lecture is among Jenny's least favorite lesson types.

Jenny: And science, you just have to take a lot of notes and listen. So that gets kind of boring, too. And if you don't take good notes, then you don't really get a good grade on a test.

Jenny perceives taking notes as a passive lesson. On the day I observed her in this class, students spent almost 30 minutes taking notes while the teacher read from an overhead projector. After approximately 15 minutes, Jenny used her hands to try to stifle yawn after yawn without the teacher noticing. Jenny's comments and behavior in class are consistent with Hootstein's (1993) position that pursuing interests in active ways is more effective with adolescent students than passive learning methods. During a later part of the class period, students used a ruler-like device to determine the epicenter of earthquakes. As a precursor to this activity, Jenny spent a few minutes talking with her neighbor to ensure that she understood what to do. She spent the remainder of the period working with the device while occasionally double-checking answers with her neighbor. The yawns stopped completely. Consistent with Hootstein's stance, Jenny prefers socializing and working with her hands to merely listening or reading. In addition,

Jenny's confirmation of her neighbor's understanding of the lesson is further evidence of Jenny's social constructivist way of learning.

Interest and Learning

Jenny talks of enjoying some ways of learning while disliking others. I wondered how this influenced her learning.

John: Tell me about the kind of assignment that brings out the best in you.

Jenny: Most of the time group work and projects. Because I don't like book work and most of the time I just put down whatever a quick answer is. I don't spend time working on it or anything.

John: You're also telling me things that bring out the worst in you. So if book work brings out the worst in you and you don't spend time thinking about it, what do you do?

Jenny: Just write down whatever answers in the book, I guess. I don't -- usually I just go back and look and find an answer, instead of trying to think of -- actually think of what I've learned and stuff. Just put down whatever answer I can find in the book.

John: Does that take a whole lot of thinking?

Jenny: No.

Jenny's high ability helps her make strong grades in most of her subjects. She often achieves good grades without putting forth her best effort. When this happens, the lack of effort just as often debilitates her depth of understanding.

Textbooks

While Jenny was criticizing one of her classroom teachers, she talked again about going through the motions without providing much in the way of effort. Jenny was

talking freely now, and her creative juices were flowing as well. Unlike before, she did not appear uneasy with her comments or agitated in any way. She leaned back in her chair, hands clasped, her opinions reflective and thoughtful.

John: Is there a better way to learn?

Jenny: Yeah. Probably not necessarily out of the book because most of the thing, like in math, you do out of the book. And I think that if we didn't do problems out of the book, if she just made them up, I think that would be better. Or if she didn't have us looking at the book or anything. It's just books, I guess. Because I don't think books teach very well because I don't think they go into as much detail. They usually just give you the little, tiny main things. But most of the time if you just get from other sources or you just talk in front of the class and don't read out of the book, then you get more details and understand it better.

John: So where would you like to get the detail from?

Jenny: I guess magazine articles, other books. I guess fictional or non fictional. It doesn't really matter. But Internet. I don't know. It doesn't really matter, as long as it's not out of the textbooks.

John: Can textbooks be a part of all that?

Jenny: Uh huh. They can be a part of it. But I just think other things give it more details.

John: Okay. More details and the details help it to become what?

Jenny: I think it's easier to learn and understand better when there's more details, I guess. The typical textbook is created with the intention of providing structure and background, but do not provide readers with much detail. Consistent with the stance of Wigfield, Eccles, and Pintrich (1996), Jenny has the ability to think more abstractly. Her

experiences in school have left her impatient with overly simplistic assignments. In fact, she feels insulted by them. The lack of sophistication with question and answer sessions from the non-detailed textbook simply disinterests her. Consistent with Eccles et al. (1993), Jenny's gifted intelligence coupled with lessons that she perceived to be below grade level led a lack of interest and a subsequent lack of engagement.

Disinterest

During several conversations, Jenny gave me the impression that she struggled in math. I made the assumption that she struggled in math due to her difficulty in understanding the subject matter. Though it may have played a role in her dislike for the subject, there was something else.

John: If you blinked your eyes right now and you opened them back up. You've just been given a magic potion that gives you the greatest amount of math ability that you could have. How would that change your view of math?

Jenny: I still wouldn't like it, because, I mean, I understand the math and I can do it. I just don't have fun in those classes. And it just gets boring because we don't ever do anything interesting.

Jenny's struggles are due to her lack of engagement in the content. Cruising on autopilot is obviously not the most efficient way for Jenny to learn, and she has little interest in engagement. I wondered which came first, her dislike for the math or her struggles in the subject.

Seeking an answer to my question, I employed Jenny's permanent file and a paper from a lesson I assigned back on the first day of school. Jenny's intelligence is considered gifted in the math area. From all appearances, she did not struggle in this subject until the

seventh grade. On the first day of the present school year, I had asked students to compose a written assessment of social studies, along with their favorite and least favorite classes as far back as they could remember. Jenny listed math as her least favorite class since the fifth grade. Jenny's disinterest in math did not hinder her performance until the content became more complicated.

Having Fun

Jenny talked about having “fun” in certain classes, and the lack of fun in most others. After surveying her numerous comments I began to wonder, what difference does fun really make?

John: How can fun help you learn?

Jenny: It just makes you, I guess, be more motivated to do it. When you want to do it, you know, instead of being kind of, “I really don't want to do this because it's boring.” So I guess when you – I think when you get to color, it makes lessons fun. And if you get to draw or do something that's not out of the book again. But it just makes it more interesting.

John: Do interesting things just come to you easier, or do you actually become more actively engaged? I mean—

Jenny: Both. I think it's easier and it makes me learn better and help me out with understand stuff.

John: How about remembering?

Jenny: Yeah. I remember a lot better, because I remember like in third grade and stuff when we had the multiplication songs, you would memorize those. Because I could never memorize the multiplication tables. When they added the song to it,

then I could remember. And that made it fun because it had something that you could do.

John: Do you still remember the multiplication songs?

Jenny: Not the songs, but I can remember the tables, though.

John: Uh huh.

Jenny: But I think the songs helped a lot.

John: Can you think of any other fun things like that you've been able to remember in recent times?

Jenny: Like a lot of times, I guess in sixth or seventh grade, our teachers would give us little phrases to memorize things. In seventh grade, when we were learning the classification things of animals and stuff, our teacher would tell us to come up with a way to remember it and I remember Katy Picks Crabs Off Fred's Green Ship. And you could remember Kingdom, Phylum, and then like all those different things. I don't remember the "C" one, but – Class – and stuff like that.

John: Keep going. Keep going.

Jenny: I can't remember the "O" either.

John: Well, you got three out of seven.

Jenny: Yeah.

Jenny discussed several activities she considers fun: hands-on activities such as coloring, music, and mnemonic devices. The coloring is consistent with Hootstein's (1993) position that adolescent students prefer working with their hands. These activities were fun and motivating for her, and were useful in her learning as well. The music and pneumonic devices were used by Jenny's teachers to help them learn knowledge-based

objectives (Bloom, Englehart, Hill, Furst, and Krathwohl, 1956). Normally, Jenny is disengaged during factual lessons, but the fun nature of the lesson motivated her. Later that day, without stopping to discuss it or even looking in my direction, Katie walked by me in the hall with a big grin on her face and listed the other four in her mnemonic list: order, family, genus, and species. Her point was well taken. Fun can be both motivating and an effective way to learn in a classroom setting.

Conclusion

Jenny's sunny demeanor, high grades, popularity, and involvement in extracurricular activities are features that are simple for the casual observer to notice. On the surface, Jenny appears to be quite comfortable with her relationships and social position in the school hierarchy. This is not necessarily the case. Without asking her, the casual observer would never know how much Jenny's perceptions of her school experiences are clouded by her inner fears. As adults, we interpret our relationships through our own experiences. For those who have experienced adolescence decades in the past, we might assume that a student like Jenny seems to "have it all." After Jenny told one of her teachers that she was going to participate in my study, the teacher jokingly asked me what I expected to learn from her. "After all, Jenny is already highly motivated."

We teachers sometimes take students like Jenny for granted. They do well in school, do not cause any trouble, have no overt special needs, and essentially blend into the woodwork. My fellow teacher's assumption that Jenny is already highly motivated was ill-defined and slightly exaggerated. My research question seeks more than the observable, "How can I get my students to complete their work?" I was seeking

motivation more consistent with Brophy's (1982) definition of "motivation to learn" as the tendency to approach tasks with serious intent to do them carefully and get the benefit from them, and not merely to complete them. I was interested in knowing what school factors influenced Jenny to actually engage in her own learning. When Jenny coined the phrase "zoning on autopilot" during our first interview, I had found our starting point. How might teachers influence Jenny's effort to engage in her learning beyond the autopilot stage?

During the months that Jenny let me roam freely through her perceptual world, I found that there were three major features influential to her motivation to engage in her own learning. First and foremost, Jenny's innate fears needed to be mollified. Second, given that these fears were placated, the opportunity for social constructivist learning was compelling to her. Finally, Jenny values opportunities for higher order thinking.

Awareness and understanding of Jenny's fears are crucial in comprehending how she can be motivated to engage in her own learning. Her fears can be viewed in two equally important directions. First, Jenny's overall perception of her relationship with the teacher works hand-in-hand with her global perception of the classroom climate. Positive perceptions create the possibility for efficient engagement, whereas negative perceptions can easily reduce Jenny to the autopilot mode where inefficient learning might occur. The bottled-up emotion that came pouring out of Jenny during our interview sessions revealed the strong anxiety that she feels in classrooms with poor or nonexistent relationships. At these times, Jenny will spend more energy trying to become invisible than in engaging in learning. At times, I believe that Jenny actively chooses to disengage.

On the other hand, Jenny can actually be motivated to engage in thinking about classroom activities when she is fearful of being called upon to answer a question. The slight anxiety associated with this possibility tends to keep Jenny on her toes. When students are chorusing answers to a teacher's questions there is no individual accountability associated with it. In these cases, Jenny is lulled into an unproductive sense of security, and other reasons for motivation need to be present in order to keep her on task.

Jenny enjoys learning in classroom structures that allow her to work with others. In classroom climates that Jenny perceives to be negative, the teacher is generally too controlling for her taste. One side effect of a controlling teacher is usually independent work. This leads to the phenomenon that Eccles and Midgley (1989) call a mismatch. The climate of the classroom does not meet Jenny's needs. When engaging in actual learning, Jenny likes to bounce her ideas off of her peers and comparing their ideas with hers. She also likes to hear how her peers interpreted the teacher's directions or comments. Dewey (1916, 1933) would argue that the conflict that might be created by this is likely to muddy the waters for Jenny at first, leading to reflective thinking and ultimately a deeper understanding of the concept under study.

Jenny may not have strong ideas about what is important to learn, but she is openly disdainful of subject matter that she considers to be wasting her time. Through detailed questioning and analysis, I came to the conclusion that she is an intelligent individual who values opportunities for higher order thinking. On the other hand, Jenny resents it when she does not understand why a teacher is forcing her to learn knowledge-based objectives (Bloom, Englehart, Hill, Furst, and Krathwohl, 1956) without

opportunities to let the meaning behind it sink in. When confronted with this, she disengages and goes on autopilot. Given the opportunity and proper structure, Jenny will utilize social constructivism to engage deeper into the content.

To summarize then, what reasons did Jenny have for choosing to engage in learning sometimes while choosing not to engage at other times? Jenny was more likely to choose to engage in learning under learning conditions that allowed her to socially construct meaning through peer interaction. This helps Jenny perceive the content to be within her locus of control while meeting some of her social needs. The nature of the content under study was important to the extent that it required more in-depth thinking and understanding in addition to simple knowledge-based objectives. On the other hand, Jenny was more likely to choose not to engage in learning when she perceived a classroom climate that was directed by a teacher who was more autocratic in nature. In this type of setting Jenny felt repressed and her fears became overpowering. Her perception of being alone in her efforts to learn increased her stress and influenced her perception of the difficulty of the material, often leading to various types of disengagement. In addition, Jenny was almost certain to choose disengagement when she perceived the content to be too easy. This usually occurred when the nature of the content was simply knowledge-based.

CHAPTER V

MISSY

Introduction

At a typical school, Missy might be considered an average student. At Broken Arrow Middle, however, her grades rank her in the bottom third of her eighth grade class that consists of 377 students. She might not be considered a chronically truant child, but Missy did incur 14 absences during the first 102 days of school, was tardy five times, and left early 11 times. Missy has been either absent, tardy, or left early 29 percent of the days thus far. This absentee rate is far higher than the school average, which is less than five percent. She does surprisingly well for the number of days she has missed. A lesser student might drown in the makeup work that this inordinate number of absences requires. Missy though, has a habit of making up most of her work adequately and in a reasonable amount of time. At times during the data collection phase of the study, her tardiness and absenteeism became slightly problematic, but just as it is with her school work, it was never an overwhelming obstruction.

When in school, Missy has a pleasant demeanor and an agreeable attitude. The seeming contradictions between her absenteeism and acceptable academic performance make her academic motivation difficult to read on the surface. She has some friends at school, and is fairly well liked by her peers. Missy is involved in community cheerleading, but is not fully accepted in the “cheerleading clique.” She is in the school orchestra, and plays her instrument well. Her grandmother is very protective of her and is

very involved in her upbringing. Missy is very thoughtful, considerate, polite, and creative. She has the tendency to wear her emotions on her sleeve, and most of the time she appears upbeat. On the other hand, her high number of absences and early dismissals may indicate existence of issues that I was not privy to.

Based upon her Iowa Algebra Aptitude Test (IAAT) scores along with her performance during the seventh grade, Missy's seventh grade math teacher recommended her to take the introductory math course in the eighth grade rather than the more difficult algebra class. Her math score on the Iowa Algebra Aptitude test taken in the spring of seventh grade was a 159. This score fell just one point short of the Broken Arrow's minimum score of 160 typically needed to become an eighth grade algebra student. Though thoughtful consideration is always given to students on the cusp, Missy's seventh grade math teacher decided that it was in her best interest to be tracked into the introduction to algebra course for her eighth grade math class.

Classroom Climate

Missy's perception of classroom climate is situation-specific—it deals with individual classroom perceptions—each of which is based upon her perceived relationship with the classroom teacher and other students (Goodenow, 1991) and her perception of the classroom teacher's relationship with other students and other student's relationships with one another. A classroom where students respect one another, listen to one another, and work to help everyone feel included is called a responsive classroom (Pergande & Thorkildsen, 1995).

Honored Voice

The climate of the classroom is a vital ingredient in Missy's situational motivation. During our initial interview, this became almost immediately clear. When I sat down with Missy for her first interview, she was eager to tell me about specific classes.

Missy: All right. First class I went to, it was language arts. Everything went okay. We would mostly work from our Literature and Writing book and then we'd do like a worksheet or something. And then kind of a, well, boring class, but it was okay. She made it fun at some points.

Her comment that the class was "kind of boring, but okay" is in direct opposition to the following comments. Time and again Missy tended to mentally excuse teachers for using non-motivating strategies if she felt that they were kind-hearted, while giving vicarious verbal tongue-lashings to those whom she felt were not. Usually a very positive person, her facial expression and voice intonations changed when talking about a social studies class she had one year in middle school. She became louder and noticeably irritable during these statements. It was evident that she was disturbed by some issues and had a strong need to vent.

Missy: And then I went to my social studies class. That class was horrible. I couldn't stand social studies. All she'd ever do was give us vocabulary and questions out of the book. Every once in a while we'd do a project, but not like that was much fun either because, well, she didn't make them very interesting. So then that was just the worst class I ever had.

Missy provided me with her notebook from this social studies class, and there were numerous examples of doodling on her vocabulary pages. Missy told me that drawing was how she was able to “make it through the class.” Recognizing that she had described similar lessons in the language arts class described earlier and this particular social studies class, yet had very different perspectives of each, I attempted to uncover the meaning behind her words.

John: Tell me a little bit about [language arts]. You said it was kind of boring, but okay.

You also mentioned that social studies was boring, but not okay. What’s the difference between the two of those classes?

Missy: Well, language arts, we always had something – she was different every day. But when I went into social studies, it was just the same old thing. She’d always give us vocabulary. She’d always give us questions out of the book. And the thing that I couldn’t stand was that she never let the kids ask questions.

John: You weren’t able to ask questions?

Missy: Hardly.

John: How did that work?

Missy: Well, she’d like, she’d say that she’d [already] answered them and we should have been listening, but we were all listening and quiet and when people still had questions that she didn’t answer, she wouldn’t answer them. And she’d say that she said them already, she already mentioned the answer.

John: What do—how do you feel the students’ relationship with that teacher was?

Missy: We couldn’t stand her. That’s practically it.

John: How do you think she felt about her students?

Missy: I don't know how she felt, but I just don't know.

John: Okay. But in language arts it was different?

Missy: Language arts, it was different. I mean we'd like, we'd read books in there. You know, we'd do like this little book. I know once we read that – I can't think of the book – The Ghost of Birmingham, or something like that. Anyhow. So we'd read that. You know, she'd give us a chapter or two every day and then we'd – at the end, we'd do this neat little project. But I mean, some days it was interesting and then others it wasn't. But it was okay.

Missy's comments that the social studies teacher refused to answer questions provides evidence that she perceived an absence of the honored voice in this social studies class (Oldfather & McLaughlin, 1993). In this particular class, Missy perceived that the teacher was not responsive to student thought, feelings, or needs. The absence of an invitation for students to participate in a collaborative construction of meaning led to an "us-her" mentality. There was little shared ownership of knowing through epistemological empowerment in this class. Missy viewed the content as imposed by the teacher, and the lack of respect she felt for the teacher further exacerbated her personal motivation to engage in her own learning.

Not only were Missy's comments distinct from one another when discussing each of these classes, her demeanor and voice inflection changed so unmistakably that it is important to note her strong emotions. Her perception of the relationship between teacher and student was a recurring matter of importance to Missy. This is consistent with Van Hoose' (1991) assertion that the quality of this relationship is the most important element

of middle school education. For Missy, positive relationships with teachers provided her with the foundation to learn.

Getting in the Swing

Missy spoke of the personal value she placed upon “being in the mood to learn” on more than one occasion. One of her teachers used gaming in the classroom as a focusing activity.

John: Okay. Tell me a little bit about your math class.

Missy: My math class? Well, every day we’d do like this fun little “Get into the Swing” game, like to get us in the mood, to get us excited about math. And we’d always, we’d have these little journals and every Friday we would write in the journal about something of what we’ve learned about the whole week. So that way we could like review what we’ve learned and we could remember that, like. So that way we wouldn’t forget it by next week if we were doing something with the same steps and the same stuff.

John: What did this “In the Swing” game do to your attitude toward other things?

Missy: That year I did good in math. I mean, it helped doing that instead of just going in there, sitting down, giving us book work and all that. It really got us excited about math.

Missy’s comments are consistent with Hootstein’s (1994) assertions that game-like features will interest students. Unsaid by Hootstein, is the longer-term influence gaming might have on a student’s perception of a class’ climate. For Missy, gaming in her math classroom had a strong influence on her perception of the teacher and the year’s

content. She became “excited about math.” In turn, she became more engaged in the material, and by doing so, became a more motivated and a “better” math student.

Getting in the Swing Part II: Extrinsic Motivators

During another school year, Missy’s math teacher used extrinsic motivators to get the students interested in the subject. How an extrinsic reward might influence a student’s desire to participate in a classroom activity is, at least in part, due to how the student perceives the reward and how the student perceives the reward’s relationship with the activity. I have included it here because Missy’s perception of the activities went beyond the extrinsic rewards. The activities had the same effect on her as the “getting in the swing” game did.

Missy: And we’d always have these problems to do at the beginning of each [math] class.

Like these little problems. And whoever got it right got like some candy or something, like a little reward. And then that’s about it.

John: Let’s go back to something you just said about candy. How, what did that do to you, to the class?

Missy: I mean, it got them, they figured out that if they get the problem right, they’ll get candy. And kids love candy. And so that got them to working faster, trying to get it. So that way, if the problem came up on the board and they didn’t get it, if they got it and then they get it right, they’d get a piece of candy.

John: Now, did everybody get candy who got it right?

Missy: She usually did first hand raised. But if – she’d usually do one or two problems to like even it out. But the person that got candy before couldn’t get it them. So that way, the whole year everybody would get candy at least once.

John: Well, when you – did you ever get candy?

Missy: Yes.

John: Okay. So after you got candy, let's say the next day or the next week, knowing that you wouldn't be getting candy any time soon, what did you do with that kind of situation? Did you still continue to try hard and get it done quickly and things?

Missy: Yes, because usually what she did, even though I got candy – I'd like raise my hand first so that way it made people like try to hurry and raise their hand.

Because they'd know that I got candy and that I wouldn't get candy and stuff.

John: So then it wasn't just the candy that got you working. It was something else. What else was it?

Missy: I don't really know. I mean, I loved math that year. I mean, she had these little plastic figurines and she'd like pour water in it showing volume and all that. And she'd have like—she'd let us work with little blocks to work out problems.

Missy's descriptions of this class were very enthusiastic. Fantuzzo, Rohrbeck, Hightower and Work (1991) would likely have argued that the offer of rewards in Missy's math class might elicit temporary compliance, but would be ineffective in helping her to become caring, and responsible self-directed learner. In a laboratory setting, this might be the case, but the extrinsic rewards did not have this simple effect on Missy. Something more complex was at play in this case. Missy's perception of the classroom climate was positively influenced by the emotional charge she received from the existence of the extrinsic rewards. On the other hand, Missy's reaction to the game was plainly influenced by her perceived relationship with the teacher and by her perception of the classroom climate. Missy's comments are inconsistent with the literature claiming extrinsic

motivators undermine intrinsic learning (Deci & Ryan, 1987; Kohn, 1993a, 1993b, 1996; Lepper, Keavney, & Drake, 1996; Ryan & Deci, 1996) while supporting Cameron and Pierce's (1994, 1996) position that extrinsic rewards can enhance learning.

Enthusiasm From Strange Places

The climate of the classroom plays a significant role in Missy's desire to participate in a classroom. During the current year, I observed Missy in Mrs. Rocker's science class. Mrs. Rocker had created an extensively detailed paper hat that was shaped like a volcano. For about a week, it was a very popular piece to a number of students' ensembles. Each day, students vied for the opportunity to wear it. On the day I was observing, Missy was among the majority of students who viewed the opportunity to wear the hat as an honor.

John: I saw somebody walking around with a hat on. What's that all about?

Missy: That's Ms. Rocker's volcano hat. She created that and like whoever wears that is like the special person of the day or something like that.

John: What does that do? I mean, do you want to wear the hat?

Missy: I don't think that it gave them any special ability or anything, but, I mean, it's just something to like get you interested and motivated. You know, I mean, they're just like, "What are you wearing?" "Oh, it's a hat."

John: Does that change the climate of the classroom at all?

Missy: It will get people saying just like, "Ew, ew, ew, can I wear the hat tomorrow," and stuff like that.

As silly as it might sound, the hat was a tangible method for students to show their enthusiasm for Mrs. Rucker's science class. While some were clearly not interested in the hat, the enthusiasm of the majority gave her class a more energized atmosphere.

Humor in the Classroom

Missy discussed her Georgia history class in the next excerpt. She describes one of the ways that humor helps to gain and to maintain her attention.

Missy: And then social studies, fun class. Funny. Very funny. He [Missy is talking about me] always makes it interesting. And he always finds something, a fun way to do something. And we'd always watch these shows – Georgia Stories – about – and this guy, Collin, comes on. We always laugh about Collin because it's – they put in there – well, you have three topics and we have to take five facts on each topic. And so then what we do is, after we've got our five facts or whatever, then we can sit there and then most of the time we'll laugh about something that comes on. Like instead of him giving us the real topic, he'll give us like the very cheesy reenactment or something like that. And so, that's about it.

John: So the thing about Collin, the host of the show, what's funny about this guy?

Missy: He talks funny. He talks like he wants to be like a news reporter or something, which all he does is talk about Georgia Stories. And, I mean, he's not really the narrator, but he just like goes in there and he'll like, he'll introduce the subject and then the subject will take off from there.

John: I see. And the fact that you're able to laugh about this as opposed to taking it all 100% seriously, what does that do?

Missy: Well, I mean, laughing about it, it'll get us like excited to like, we want to see like another one. And so that way it will get us like encouraged to like learn more about whatever.

John: But you take the subject matter seriously?

Missy: Uh huh.

A sense of humor is one of the key qualities The National Middle School Association (1986) has identified for effective teaching in the middle school. In Missy's case, her perception of her teachers' sense of humor is important to her perception of the classroom climate.

Perceived Student Needs

As pre-adolescent and emerging adolescent teenagers, middle school students possess unique characteristics that lead to a set of unique needs. Scales (1991) lists seven key developmental needs that generally characterize adolescent students:

- positive social interaction with adults and peers
- structure and clear limits
- physical activity
- creative expression
- competence and achievement
- meaningful participation in families, school
- communities, opportunities for self-definition

Some of these needs are more essential to Missy than others. The data reveals that a number of these needs have been met at various times by some of Missy's teachers. At other times, the absence of a teacher's commitment to meeting certain needs (at least in

part) resulted in a lack of motivation and/or Missy's perception of a negative classroom climate. I have organized this section into subsections that illustrate Missy's key needs, how the needs were or were not met at school, and how that influenced her motivation to engage in her own learning.

Peer Interaction

Young adolescent students' concentrations are highly oriented toward peers and a concern about social acceptance. Urdan, Midgley, and Wood (1995) recommend work in small groups to promote opportunities for interaction with peers and adults. Missy discusses her perception of group work.

Missy: Group work to me, it seems that you get to get to know your peers a little better, plus it's – if you're working on like a big, big project, then it may help get the work done when it's done. But if – I like working in groups because to me it just seems more fun because you get to work with your friends. It has nothing to do with like taking the easy way out and stuff.

Missy's comment that group work helps students to get to know their peers better is consistent with the position of Wigfield and Eccles (1994). They concluded that middle school students are concerned with social acceptance. Missy also states that group work "seems more fun" than traditional seatwork. Her reasoning is that "working with her friends" is better than working alone. The collaborative nature of this type of work fulfills another need. Scales (1991) claims that adolescent students have a need for positive social interaction with adults and peers.

Competence, Achievement, and Autonomy

Another adolescent need is the desire for competence and achievement (Scales, 1991). Missy told me about a lesson in math that made her feel a sense of self-determination.

Missy: Math class was fun. I had a funny teacher. She was, I don't know, she'd always have something fun to do. Like I remember we had to work – she gave us this little math project and we had – it was like we were on our own, we were teenagers, and we had to buy groceries, taxes, bills, etcetera. And that worked and it was fun.

Missy's enjoyment of this lesson is consistent with Scales (1991) adolescent needs for competence and achievement. This simulation provided Missy with the opportunity to feel independent, yet practice in a safe environment. Beane (1990) recommends that middle school teachers create a curriculum based on social and individual interests that provides students with opportunities to practice in a safe environment. Missy's choices on which groceries (and how much) to buy gave her choices and experience in a non-threatening environment. She told me later that she was faced with "real world" decisions that forced her to think about the kinds of choices adults must make on a daily basis. The "real world" aspect of this simulation might also cross the border between the needs category and the relevance category.

Creativity, Choice, and Limits

Missy discusses a science assignment that required the students in the class to create their own test. I found it enlightening that Missy perceived this assignment as an opportunity rather than an obligation. In addition to competence and achievement, Scales

(1991) lists creative expression as an adolescent need. These two needs work together in the following excerpt, along with the need for structure and clear limits.

Missy: ...This week [in science] we get to create our own test, which can be a good thing or it could be a bad thing. It depends on how you do it.

Though she seemed slightly anxious by the prospect of the daunting task in front of her and by the unknown future outcome, she told me that she was very concerned with doing a good job and getting a good grade. She told me later that the lack of guidelines first described by the teacher was later salved. The adolescent need for structure and limits that Scales (1991) listed was a factor in how Missy perceived the assignment. It was a new type of assignment, and until she clearly understood what was expected, the fear of the unknown outcome intimidated her. Later, she told me that she did a “really god job” on her creation of the test, and that she made an “A” on the test as well.

Physical Activity

Scales (1991) also mentions physical activity as one of the key adolescent needs. Working manually with objects helps Missy to learn more about a topic under study.

Missy: Science. Science was fun. We did these little dioramas. We’d do a lab. She’d bring in stuff that she got from home and we’d like – like the next day we’d like dissect it or something. Like I remember once we did these mushroom prints. And that’s where you took off and you cut the stem off the mushroom. You place it on a white sheet of paper. And then you’d let it sit there for like a week or five days. And then you came and you picked up the mushroom and the pores from inside the mushroom were all on the paper. And then what you had to do is you had to spray it with hairsprays. That way the pores wouldn’t come off.

John: Uh huh.

Missy: And it was an interesting lab. I've never seen anything done like that with a mushroom.

Labs and other hand-on activities was a recurring theme in my conversations with Missy. She uses the word "interesting" in her descriptions, but I sensed that hands-on physical activities that fulfilled one of Missy's adolescent needs. Lazear (1991) would say that Missy has a tendency toward kinesthetic intelligence. Kinesthetic learning is often experiential in nature, and is typical of lessons with social constructivist characteristics. Lazear calls this "learning by doing" (p. xiii). Fulfillment of this need was influential in motivating her to engage in learning the content. Missy discussed another lab that she remembered from Mrs. Rocker's science class during the current year. Note the detail with which she describes the lesson and concepts learned.

Missy: This year in science we're doing this thing right now where we're going to do a video production about volcanoes. And she always has something funny to talk about. It's an interesting class. Every day it gets funnier and more interesting.

John: Tell me more about that class and tell me more about the – tell me more about some of the things you're doing with volcanoes.

Missy: Volcanoes. We just previously got done with a lab. And what we did was you had to pop a balloon buried in sand to where it was kind of like a volcano. She had a pencil and at the end it had a tack taped to it. And what you did was you packed sand on top of the balloon to a certain height. And then you'd take the pencil and you'd poke it from the top. And then you dig away the sand at the top and then you'd go down and you'd look at the caldera or the place where the balloon was,

the empty hole. And then you'd measure the diameter and the width and the depth. And then we've also done – we went to the lab. We looked at current eruptions that have erupted and that's about it.

Missy's comment that "every day it [science class] gets funnier and more interesting" speaks of her desire to participate in assignments that allow her to be involved. This is consistent with Hootstein's (1993) claims that adolescent students need to pursue interests in active ways. Missy prefers socializing and working with her hands rather than merely listening or reading. I observed this lab during one of my classroom visitations.

Missy's recollection actually comes two weeks after the lab transpired and a week after the chapter test. Her detailed retention and subsequent recitation of the science content (even after the chapter test) shows how active learning can be influential in helping her retain what she learned. The learning aspect of this excerpt is consistent with Vygotsky's (1978) social constructivist position.

Active Versus Passive Learning

Wanting to probe deeper into Missy's strong positive perception of her science class, I asked her to compare the strategies used in this class with those that she found to be ineffective.

John: I'd like you, if you could, to compare the way that you're learning in science with ways that you think might not be so effective.

Missy: Okay. So, the ways that I learn in – what do you mean by that question?

John: What kinds of things are you doing in science that you find to be pretty effective ways of learning?

Missy: Oh, okay. I guess really the way that I learn best is when I interact. I'm a visual learner. I learn by visual things. So, like labs, videos, pictures in books. But when I read by the text, it just, it doesn't click with me as well as if we would like watch a video or something of that sort.

John: When you say it doesn't click with you, what do you mean by that?

Missy: Like I won't – if I would like read the text and she says, "Okay. Tomorrow we're going to have a quiz on it," then I won't remember the stuff as well as if I were to watch a video or look at some pictures and stuff like that.

Missy's comments show that she is aware that she learns well as a visual/spatial and a body/kinesthetic learner (Lazear, 1991). Missy is motivated to learn in classes where she has the opportunity to see and/or experience the content and concepts that she is supposed to learn. Missy will exert minimal effort to get a non-interactive or non-visual assignment done, but these types of assignments do not "click" for her. I asked her about assignments that did not click. Writing down vocabulary was the example she used.

John: Okay. What's your mind thinking about during this type of assignment, the kind with vocabulary or textbook or whatever?

Missy: Boring.

John: That's what your mind is thinking? As far as your effort goes, I would like to, you know, kind of probe into that a little bit.

Missy: I'll like, I'll put effort towards it because, I mean, it's just that when you sit there and you're doing vocabulary, I mean, you're just sitting there and you're just like, "This is so boring. I want to get it done. I don't want to do this." But yet sometimes what she'll do is she'll tell you to copy down vocabulary and then

everybody's just like, "Uh." But then like the next day she'll take us into the computer lab and we'll do like a little crossword puzzle of some sort. So she'll find some way to make it fun, sometimes.

Missy's negative reaction to the more passive learning strategies is consistent with the position espoused by Schug, Todd, and Beery (1984), as is her preference for instructional strategies that actively engage her in learning. While completing a typical vocabulary assignment, Missy's goal is to simply complete the assignment. The boredom that she discusses leads to her lack of engagement. When she has the opportunity to interact with the vocabulary by other means like computer assisted learning, she perks up and becomes more motivated to learn the material that is being presented.

This type of assignment crosses the borders into the interest vs. disinterest category, but deeper analysis goes beyond the surface words "boredom" and "fun." In this case, the reason Missy is disinterested in one assignment and has fun with another is due to her learning style needs. These needs are disregarded in one situation while they are addressed in the other.

Locus of Control-Student Efficacy

Confidence

Missy has strong confidence in her abilities. She is a proud student who perceives an internal locus of control when her grades are good. Even when absent, Missy has a penchant for making up work. This is consistent with The Cognitive Evaluation Theory (Ryan, Connell, & Deci, 1985), part of which states that any incident that facilitates the perception that a person can control outcome of an activity will increase intrinsic

motivation to engage in that activity. Missy makes her work up because she perceives that she is in control.

During an informal conversation, I told Missy that I was impressed with how well she was able to keep up in school with all of her absences. The proud look on her face as she told me that it was easy to do communicated to me that she felt that she was confident in her abilities—she was in control. Graham and Weiner (1996) link the controllability with emotion. In this case, Missy's emotion was pride.

It's the Teacher's Fault

In the one instance that she shared with me when she had a failing grade, she blamed the teacher, thus ensuring in her own mind that it was not a matter of her abilities. In her mind, the problem originated from an external source—the teacher.

John: How were your grades in sixth grade?

Missy: Grades? My grades were good.

John: Uh huh.

Missy: One time I did get a "U" but that's because my teacher lost some of my work when I turned it in so I was – that was – I told my parents that and they understood.

When Missy told me that the teacher lost some of her work, the emotion she displayed was anger. Her emotions and comments are consistent with the attribution theory (Graham & Weiner, 1996; Weiner, 1986). As a student who is used to success but having failed in a particular class, Missy saw the reasons as externally controlled. Because the failure was perceived as being caused by forces not influenced by her, she was unashamed. In addition, since she perceived the teacher as the source of her failure, she

became angry. Her reaction is again consistent with Graham and Weiner's position that controllability is linked with emotion.

Relevance or Content Value

Personal Experience and Teaching Methods

Missy did not talk much about the relevance of the content she is learning in school. In order to probe into her perception of how the relevance of content influences her motivation, I bluntly asked her about this concept.

John: What are you learning in school that might help you outside of school?

Missy: Well, mostly in science we're—we've been learning about the earth and it's like rocks and sediments and stuff like that. So probably that would—I mean, I've been outside personally and looked at rocks to see what I've found and stuff. And I also have a mineral collection and I'll go gem mining sometime. So I looked at those and see—to see if I could classify them basically.

John: You looked at your own collection?

Missy: Yes.

John: Were you able to classify any of them?

Missy: Yes. I was able, of what I have learned in science, I was able to classify most of them. But I mean, most—some of them haven't been tumbled and polished, so it was a little difficult. But it wasn't that hard because of what I had learned.

John: What do you mean "tumbled and polished"?

Missy: Well, a gemstone can be tumbled and polished in a tumbling machine to where it grinds off all the outer stuff and it polishes it to where it looks shiny and it removes all the dirt and other stuff from the rock.

John: And you—yours are not polished so you're not able to see? I don't—I guess you're just not able to do what?

Missy: It's not as easy to tell if they're not polished. But with an amethyst it's kind of a crystal when you mine it, so you can tell an amethyst from a ruby or something like that.

John: And how interested are you in this?

Missy: It's interesting, seeing as how I like—I mean, I just think it's interesting. So that way you know what you're looking at if you pick up a rock some day. You know, knowing somebody else, you might pick up a rock and throw it away and it might have been something important.

John: And how interested in this were you before this year?

Missy: Not very. Especially seeing as how most of my teachers made it pretty boring. I mean, you know, it was like, "Alright. Today we're going to do book work. We're going to do a lab." And that was about the only time I got excited really was when we were doing a lab. So that way I could really interact with it.

John: What has your present science teacher done to make it different?

Missy: Well, she's done a little bit of everything. We watched a video on the rock cycle and we've done a little book work, you know. And we classified rocks ourselves. And what she did on the test was instead of asking us to identify rocks and knowing their characteristics and memorizing them like some other teachers would, she let us classify the rocks like we did in the lab. And personally I think that was fun.

John: And this rock collection you have at home, where did it come from?

Missy: We went up to North Carolina—Cherokee, North Carolina—and we go gem mining there at a little place that they have on the side. We've also went up to Dahlonega and went gold mining there. And that's basically where we go most of the time.

John: And when did you get this?

Missy: The rocks, I've got them over years past and stuff. Because we used to go up there like every spring break. And we still go up there. It's just that sometimes we go to different places now on spring break. So we usually don't go up there much anymore.

John: Did you know—what did you know about rocks before this school year?

Missy: Nothing much really. This is really where I'm really learning about rocks is in the eighth grade. Besides that, I mean, we've studied rocks but the teachers made it so boring that it was hard for me to remember a lot of stuff. I mean, we studied about sedimentary and metamorphism and all that, but we never really learned that part about it.

Missy's comments that she had, "been outside personally and looked at rocks to see what I've found" is strong evidence that she has engaged in learning beyond the school requirements. She also used her own mineral collection to practice some of the classification techniques she learned in her science class. Apparently, there was already a preexisting interest there, but Missy had little knowledge of what she owned. Until the eighth grade, Missy also had little desire to gain more knowledge. The concepts learned in class changed the way she looked at rocks. Using Piaget's (1967) concept of adaptation, Missy was attempting to assimilate newfound knowledge with her preexisting

notions about her rock collection. Her judgments of her rocks changed based upon the new information.

Throughout this segment of our interview, Missy's tone was simultaneously proud and condescending. In the manner of a patient kindergarten teacher, she explained her newfound knowledge on rocks and minerals to me. Her facial expressions and body language spoke stronger than her words. Though she appeared to perceive my questions as unenlightened, she was delighted and enthusiastic to display the details of her knowledge.

Missy's overt reasons why she perceives rocks to be relevant are basic and concrete. Her comment that, "you know what you're looking at if you pick up a rock some day... you might pick up a rock and throw it away and it might have been something important" does not show a great deal of insight. Her stated reasons for perceiving rocks to be relevant are not necessarily an accurate portrayal of why this knowledge became valuable to her. In order to uncover the real reasons, it is necessary to read between the lines. Missy's perception that knowledge about rocks and minerals is relevant comes from two sources. One, her past experiences with rocks and minerals provides the foundation. When Missy divulged that she owns a mineral collection and has been gem mining, it provided evidence of past experience with rocks. Two, her eighth grade science teacher provided Missy with the needed information and conceptual background in an interesting way.

Hootstein's (1995) position that relevance is inherent in subject matter through sufficient prior experience is right on target. Missy was easily able to relate her past experiences with the new concepts learned. The second source of Missy's motivation to

engage in her own learning is even more valuable. Missy claims to have had opportunities in school to learn about rocks before. Teachers have attempted to teach her about rocks before, but it was all so boring she doesn't remember much about it. In the past, though she still owned the rock collection (sufficient prior experience), she chose not to engage in learning. The way material was taught during the eighth grade changed Missy's perception, making this topic more interesting and relevant to her. Through multimedia videos, "a little book work," and interaction with the content (labs), Missy's science teacher turned her on to rocks. It appears that the test was the final piece to the puzzle. Missy's teacher followed through on the labs and provided the students with a hands-on test. Missy said the test was "fun."

Student Interest vs. Disinterest

Missy talks often of classes that were "fun" and lessons that were "interesting." So far in this chapter I have covered a number of reasons why Missy has called classes fun. In this section I will specifically focus upon lessons and types of teaching strategies that Missy has perceived as motivating through her middle school years.

Hands-on Activities

Hands-on lab lessons in science have been consistently described as interesting by Missy. In this case, she describes an activity that provided her with a chance to use higher order thinking skills.

John: Okay. Tell me more about science.

Missy: Science was fun. science, we'd do a lab. I remember once we did a lab with M&Ms. And I think it was something about like simple machines, I think. I'm not sure though. And we always—and we had to build these machines and they had to

be able to pop a balloon. And we were allowed to work with nails, hammers, your basic stuff, to build a simple machine. And you only got certain materials to work. And this was like a two-week project. And you got to work on it mostly in class because you couldn't really take it home.

This type of activity fulfills some of the characteristics that were described earlier during the “needs category,” but is included here to show the uniformity of her comments as well as the reliability of this type of influence on Missy's motivation. This is again consistent with Hootstein's (1993) position that students are more interested in learning in active ways.

Transference of Interest

Missy reported that one of her language arts teachers used some interesting techniques and shared some “inside information” that helped her to become interested in writing and reading.

Missy: Okay. Last year in language arts we – it was fun in language arts. That was probably the most fun that I've had in language arts like throughout my school years. And what we do is like, we'd write poems, we'd keep up with a writer's notebook to where we'd write in it like a little bit. Like you're supposed to write in it once a night and then come back in the next day and like share what we wrote. That was about like, I don't know, five or ten minutes of class. And then after that, we'd move on and we'd learn grammar. And some days we'd work from our Literature books. We never really read a lot out of our Literature book. She mostly read us books. Like I remember us reading The Outsiders and then towards the end of the year, we watched the movie. And that – and she'd let us do

that to relate the book to the movie. To like – I guess what she was trying to do is to get us motivated into reading books instead of watching the movie.

John: Uh huh.

Missy: Because some movies have – I mean, some books have movies. So she said that instead of watching the movie and instead you read the book, read the book first and see which one you like better.

John: How did that work?

Missy: It worked good. It got me into reading.

The language arts teacher successfully transferred Missy's interest in movies to novel reading. Missy's tone made me feel as if she was letting me in on an important secret when she described The Outsiders. She was genuinely impressed with her teacher's knowledge and surprised by the discovery that "some books have movies." Her perception that the teacher shared this "inside information" with the class made it more interesting to her. The look on Missy's face as she told me this showed me that she was proud of herself for sharing this information with me.

Missy's excitement over the newfound "truth" is centered on her judgment of the new information, which is based upon her own experiences, preexisting knowledge, and perception. Missy told me that she was planning on reading more books that were later turned into movies. This is consistent with a plethora of research. Oldfather's constructivist (1992) "Continuing Impulse to Learn" is evident in her later comments that she was interested in reading to see how the movies might differ from the original story. I was left with the impression that Missy was mentally trying out her teacher's revelation to see if it was the truth. In so doing, she was seeking true understanding by constructing

her own perceived truth. As she reads new books and compares them to movies, she will remain active in her own learning.

Variety in Class

Teachers who used a variety of lessons and a variety of sources of information keep Missy more interested, motivating her to try harder. Contrary to her other social studies experience, Missy describes a positive social studies class from earlier in her middle school career.

Missy: Like one day we may watch a video. And then we got these little maps and you had to color them and that helped us learn about the countries and what we were studying about. And we went to the computer lab and we did this fun little game. And it was about – it maybe took about two, three days. It was called – they were AfricaQuest, AsiaQuest and I think it was Quest to Europe. But I'm not sure. Anyhow. So we did those and you had—they came up with questions and you had to answer the questions as you read along and you learned about like the Middle East or Egypt or whatever.

John: How does that compare to working out of a textbook or working along with other—

Missy: It gets you interested. It gets interesting. Because I mean they'd have like some gross stuff and then they'd like – now, some kids, I mean, they'd want to read along, you know, to get to learn more. And sometimes there would be like cool stuff. Like – it was just, it was neat.

John: And you were working on the Internet?

Missy: Uh huh.

John: Okay. And these websites came from where?

Missy: We went to the school web page.

John: And so this is through the teacher's web page.

Missy: Uh huh.

John: Okay. What kind of cool stuff? I mean, can you think of anything?

Missy: I know that they'd always have these little mystery things and you'd have to go in there and you'd have to see if you could guess what it was. And then if you scrolled down, it'd tell you about what it was and then it'd go into facts about what it was. It was neat. Because then they'd have like this little quiz or something and then – it was interesting.

Missy's list of interesting classroom assignments (eg. videos, hands-on, computer assisted learning, simulations, games) is similar to the one declared by Hootstein (1995).

The possibility that she might get the opportunity to participate in one of these motivating lessons on any given day in this social studies class influenced her attitude toward this class. She told me that she looked forward to going to the class.

Computer Assisted Learning

Missy's comments that she was motivated by "mystery things" is consistent with the literature. Pate, Homestead and McGinnis (1997) state that, "learning comes from within, from the desire to satisfy curiosities and know more about self and society. The process of learning then becomes as important as what is being learned" (p. 8). The "mystery things" may have been artificially created curiosities, but the only way for Missy to satisfy them was to investigate by delving further into the content in the Internet lesson.

Along those same lines, Missy talks about the very real possibility of finding “gross” or “cool” things during the lesson. Harden’s (1991) recommendation that teachers use adolescent fascination with murder, mayhem, and rebellion as a means to arouse adolescent interest in the social studies rings true in Missy’s statements. While the possibility of students finding “gross” or “cool” things during the lesson might be used to hook student interest, Missy claims that she was motivated to read the material on the Internet.

Internet lessons are only one method of using computers Missy discussed. In her current language arts class, her teacher used technology to create an interactive lesson that was part assignment and part quiz.

Missy: Language arts. Interesting, fun class...and then we’ve – just the other day we went to the computer lab and we took this quiz. It was a quiz on all the kinds of grammar – like an adjective, adverb, preposition. And we had to click on the adjective or the verb in the sentence. And then at the end, she recorded the grade for a grade. It was like a quiz game.

John: Uh huh.

Missy: And at the – if you scrolled down, it had like ways to help. Then after that, we played – we had to play this game to where we had to match like the word, like an adjective and we’d have to match it with its definition. Like an adjective describes a noun. And so, and then you – then, that was just a fun game. It was called Concentration, to like help you concentration and help you to learn.

John: Did it help you to concentrate?

Missy: [nodding her head] Yes.

Keller (1980) maintains that gaining interest is a prerequisite to learning, but that it needs to be maintained. The computer-assisted learning served to gain, or arouse (Day, 1982) Missy's interest, while the interactive and gaming aspects combined to maintain Missy's interest. With her heightened interest and level of attention, a continuing motivation to learn was cultivated.

Disinterest and Boredom

Contrary to the other math class Missy shared earlier in the chapter, she discusses her boredom with the lack of variation in everyday assignments in another class. Though she attempts to sugar coat her comments with a short comment on trivial pursuit, the gist of her comment concerns the lack of lesson variation.

Missy: Math is okay. What we do mostly is we go in there, we'll work problems, have a quiz and then we'll like – some days we'll play Trivial Pursuit like after we've done math and stuff, which, that's fun, you know. We always enjoy that, you know. She always lets us have like a little break from math. And so it's an okay class. I mean, it's nothing that anyone really looks forward to because, I don't know, I mean it's just kind of boring. You never do anything interesting. I mean, like, we've mostly, all we've done is just go in there, work problems, take a quiz, learn something new and maybe have homework maybe once, twice a week. Maybe not even homework.

The expectations the Missy had going into class each day were the same. She expected to go into math and work problems and take quizzes. Her boredom is consistent with the findings of Small, Dodge, and Jiang (1996). They would likely say that the reason for Missy's boredom is based upon her disinterest in the class due to the lack of a stimulus.

Sensing that an expectation of assignment variation was a stimulus for Missy, I returned to this topic during a later interview. I asked her to tell me more about classes that lacked variation in assignments. Rather than telling me more about the math class she discussed above, Missy thought I was talking about the social studies class that she had been unhappy with.

Missy: Okay. I think that you're referring to my sixth grade and that sort. I'd walk into social studies. We'd sit down. She'd put up the assignment on the board. We'd copy it down. Every day we did not go one day without doing vocabulary. We'd always read out of the book, do vocabulary, questions from the book. Every now and then we'd have a project, but it wasn't very fun. She would not let you ask questions. She wouldn't let you do anything. You just, she just gave you the assignment and expected you to do it, pretty much. Some days she would explain – we'd explain it every day. It's just that she just – it wasn't fun in that class.

Missy's comments that her teacher, "didn't let you ask questions" crosses the border into the locus of control category. Her disdain for the teacher and the climate of the classroom, along with her expectation of "boring" vocabulary assignments led her to disengage in learning. Still talking about her dislike for the social studies class, Missy becomes more specific in how her disinterest in the class influences her motivation. Liking a class is an important feature in her mind.

John: What sort of feeling did you have while you sat in that classroom day after day.

Missy: To tell you the truth, I could have fallen asleep. It was the most boring class I've ever been in. After you did vocabulary and all this, it was just – I did not like it at all.

John: Uh huh. Liking a class is important?

Missy: I think so, because it's one way to get you motivated into learning. So like if you come in and you do something fun, then you'll get interested into what you're going to do later on. Like if you go in there and you know that you're going to do something and you know what you're going to do, it's just that you might as well just go to sleep in the class, because it's boring if you know what you're going to do every day.

Missy's comments that, "if you come in [to class] and you do something fun, then you'll get interested into what you're going to do later on" indicates that the arousal of her interest is likely to lead to the continuation of her interest. Missy affirmed that liking a class is important to her. Her perception that she is likely to encounter interesting lessons in a particular class influences her feelings toward that class.

Hypothetically Speaking

Missy had been talking about one aspect of the social studies class that she disliked, the lack of variation in assignments. I asked Missy to pretend that she came into a classroom that typically has monotonous and mundane routine. When I said this, Missy leaned back in her chair and rolled her eyes at the thought. Next, I told her to pretend that the teacher had planned an interesting lesson for the hypothetical day. At this point Missy's expression changed again. An optimist by nature, she became hopeful and animated.

Missy: If I would walk into that class and she would have something totally different, I would have been so happy because that class got so old. Everybody probably

would have been more interested into learning, instead of just sitting in there, doing vocabulary and all that.

Since Missy had lamented earlier about the negative affects on her motivation from getting shut down while asking questions, I went a little further with our hypothetical situation. I was interested in seeing how the hopeful possibility of participating in an interesting lesson might interact with a negative classroom climate (as perceived by Missy).

Missy's statements in the following excerpts weave their way through three different categories: classroom climate, locus of control, and student interest. It would have been reasonable for me to place these statements within any of the three sections. I have chosen to place them here because they are born from statements that reflect Missy's interest in learning.

John: Do you think if you were doing an assignment, that you started to do something different, you might get excited about it, as you've mentioned. What would happen if you begin to get excited about it and then you have questions?

Missy: I'd probably ask the questions and to see what her reaction would be.

John: You're shut down.

Missy: Then I wouldn't really like it. Because, I mean, I like a class to where like you can ask questions and so that way you can get a better understanding of it. And so, if she were to – if I were to go in there and something was to be new and I liked it and I had a question about it and I asked her and then she just like – she'd tell me that she already addressed it – then I'd probably feel the same way, even if the assignment was exciting.

John: Uh huh. And in the end, your effort and your engagement – the things that we talked about as far as wanting to understand?

Missy: They were the same. They – I wanted to understand it. She just – she'd never give us a chance to.

Missy started out her statements with her eyes wide open in a hopeful expression. After I threw the wrench into the hypothetical situation though, her face clouded over and her posture was altered once again. She created a mental picture of a place where negative experiences were commonplace for her, and stuck to her guns.

Her last comment that, “I wanted to understand it. She just –she'd never give us a chance to” reflects qualities of the locus of control category. Regardless of how interesting a teacher tries to make a lesson, Missy will not be motivated to engage in her own learning if she perceives this type of climate exists. She perceives the possibility of true learning as beyond her locus of control. In her mind her lack of commitment to the assignment is the teacher's fault, and Missy basically washes her hands of it. She will likely work on the assignment without putting forth much effort, and by her own earlier admission, won't learn much of anything.

Interest and the Classroom Climate

Missy did not feel that either her language arts class or her social studies class during her sixth grade year were very interesting, but she consistently absolved the language arts teacher, while denouncing the social studies teacher.

John: You talked about your sixth grade language arts class and you also talked about your sixth grade social studies class. And in those classes, you said, “Well, they're both kind of boring. But language arts was okay.”

Missy: Uh huh.

John: What's the difference in the way that you were treated and the way that, you know, that helps to make it okay?

Missy: Between language arts and between the social studies class, I – walking into language arts, it got me up and going again. Because let's say that I went to social studies first and I was – it was another boring day in social studies. Then I come into language arts. I'd be ready to go because she did something that the social studies teacher didn't do. She changed the assignments around.

John: Uh huh.

Missy: And that's about it. Besides that, it was okay.

John: How did the feelings in a class lead to better learning or to worse learning?

Missy: Probably if it was a more exciting class, then I'd probably feel a lot more better about learning. I'd probably like you said last week, I'd probably be on the edge of my chair wanting to like do something. But if it was like that social studies class in sixth grade, I'd just go in there, sit down, and just want to get the class over with because it was so extremely boring.

Missy's perception of how often the teacher varied assignments was linked with the classroom climate. In her mind, language arts class was not her favorite class, but it was a step up Missy's hierarchy from the social studies class. She told me on a number of occasions that it "was boring, but ok." Missy's perception of this class was more favorable than her perception of her social studies class because of the climate of the class and the variation in assignments. There was no consistent stimulus to offset the boredom (Small, Dodge, and Jiang, 1996) she described, but her perception of the

classroom climate in language arts provided the necessary background for which she might be willing to engage if other characteristics, such as interest, should avail themselves. She may not have been highly motivated in her language arts class, but she was not completely turned off.

Interest Does Not Necessarily Lead to Learning

In one of her language arts classes, Missy discusses an experience with music that she said motivated her to learn a concept.

Missy: ...we learn about – the teacher made up a song about linking verbs and it was to the tune of “Mary Had a Little Lamb.” And then towards the end, we’d say all our helping verbs. And that was to help us to get to memorize it in like a fun way.

That’s an interesting way to memorize something.

Missy seemed to be impressed with the idea of using music as a learning technique so during another interview, I asked her more about the Mary had a Little Lamb song. She smiled, then broke out in song.

Missy: I can—I’m still kind of memorizing it, but it kind of goes like, “We have learned our helping verbs, helping verbs, helping verbs. We have learned our helping verbs and we’ll sing them for you.” Then I don’t know the rest. Like I’m still working on the helping verbs. But – and then you list the helping verbs and that’d be it.

This second interview had taken place almost a month after the first one. The section on helping verbs was long over. Missy’s comments that, “I’m still kind of memorizing it” told me that she felt warmly about this lesson. On the other hand, her inability to remember any helping verbs is an indication that music did not work to help her

memorize the helping verbs or to understand the concept that makes a word a helping verb. Thinking she might have felt ambushed by the question, I approached her in the hallway the next day. Embarrassed, she indicated that she still could not remember the helping verbs. Her embarrassment once again reflects the locus of control category. Specifically, Graham and Weiner (1996) might say that Missy's interest in the assignment and her subsequent inability to memorize the complete song led her to attribute her failure to herself.

Conclusion

Missy's perception of her academic subjects is subjective and situational. She enjoys being a part of "fun" situations, and enthusiastically seeks them out. She is highly influenced by her perception of the classroom climate and her perception of her relationship with each teacher. The way she views the lessons within a class is influenced by those perceptions, and the way she views the lessons influences her perceived value of what she is learning. In the end, these perceptions influence the amount of effort she deems necessary to become successful. Missy's definition of success is situational as well. During classes that she enjoys, her perception of success is true understanding. While she is in a class that she dislikes, her definition of success is "just getting it [the work and the class] done." The effort she puts forth in order to understand concepts in class is far greater than the effort she exerts when she is just getting the work done.

Missy sees much of the world in terms of black and white. The gray area in between is very small. Since Missy's perception of a classroom climate and her relationship with her teachers is vitally important to her, she has the tendency to polarize her perceptions of her classes. She tends to perceive events associated with teachers and

classes that she likes as positive while perceiving those associated with classes and teachers she dislikes as negative. When probed to discuss negative aspects of her positive experiences, she becomes defensive and cagey. Conversely, she finds it difficult to spot and discuss positive aspects of experiences she has already mentally written off as miserable.

To summarize, what reasons did Missy have for choosing to engage in learning sometimes while choosing not to engage at other times? Missy's reasons for choosing to engage in learning were based upon her perceived interest in a lesson. Missy's interest fed upon a combination of classroom qualities. A positive relationship with her teacher proved to be a vital ingredient in Missy's motivation. If Missy perceived the teacher to be respectful and have a good sense of humor, then her perceptions of other aspects of the classroom improved dramatically. With this ingredient accounted for, Missy's reasons for choosing to engage in learning included lessons that involved peer interaction, physical activities, games, hands-on activities, and computers. It appeared that teachers who used a variety of lessons positively influenced Missy's willingness to engage in learning as well.

Missy's reasons for choosing not to engage in learning often involved a dislike for a specific teacher or a constant expectation of lessons that she perceived to be individual and passive in nature. When she perceived that a teacher was disrespectful to the students or she perceived that she was powerless to ask content related questions, Missy was likely to choose disengagement. Regardless of her relationship though, Missy was disinclined to engage in learning when the lessons were consistently textbook oriented

with little or no chance for positive interaction between students or between the teacher and students.

CHAPTER VI

BOB

Introduction

Bob is an active 13 year-old adolescent boy. Bob is slightly bigger than most of the boys his age, but is not the largest boy in his class. He has light brown hair, stands about five foot eight, and weighs about 150 pounds, though his round and usually smiling face makes him appear to be heavier. His grades place him in the middle third of his class that consists of 377 eighth grade students. He plays football and baseball in the community, and is an esteemed member of the school band. He is currently ranked the sixteenth best clarinet player in the state. Bob likes to think of himself as a jokester, and he expressed to me that it is important for people to see him as funny. His parents have taught him to respect authority, others, and himself. During the seven months that I have known Bob as my student, I have corrected minor behavior in class on a handful of occasions. These behaviors are usually silly in nature, and are by no means out-of-the-ordinary.

During his years at Broken Arrow Middle, his grades have ranged from “A’s” to “C’s.” Based upon his Iowa Algebra Aptitude Test (IAAT) scores and his math performance during the seventh grade, Bob’s seventh grade math teacher recommended him to take the introductory math course in the eighth grade rather than the more difficult algebra class. His math score on the Iowa Algebra Aptitude test taken in the spring of seventh grade was 141 out of a possible 199. By no means does this indicate that he does

not have the ability to learn basic algebraic concepts, but he fell far short of the Broken Arrow's minimum score of 160 needed to become an advanced eighth grade algebra student. Therefore, he has been tracked into the introduction to algebra course for his eighth grade math class, where he is achieving without struggle.

Dweck (1989) would identify Greg's orientation to achievement as a mixture of performance orientation and learning orientation. Though Bob might be considered a student with a stronger learning orientation, he describes evidence of both below.

John: I'd like for you to tell me, when you come to school in the day time, what are some of the things that you try to accomplish here at school, the main things?
What are you here for?

Bob: I try to keep my grades up, which I usually do. And I look forward to coming to see my friends. But doing the work is easy so I see my friends and do the work.

John: So when you do the work, you're doing it for grades?

Bob: Well, to learn it, too, but I want to keep my grades up.

John: Okay. When it comes down to it, I mean, I want you to think past some things here. What are you learning for?

Bob: Probably for my future. I'm learning how I'll know how to do certain things when I'm older. Even though we learn some things that will have an effect on me out of school.

Bob's concept of orientation to achievement is skewed in the direction of learning orientation (Dweck, 1989). Under most circumstances, he will complete the work assigned. When he does this with a performance orientation, Bob is not usually solidly engaged, and he is not learning efficiently. He knows how to play the achievement game,

but is not an enthusiastic participant. Bob differentiates between wanting to learn (learning for understanding) and being forced (learning for achievement) to complete an assignment. In the following excerpt, Bob discusses his perception of achievement orientation.

Bob: I don't really take in the information. I'll take notes on it, but I won't really pay attention to what I'm writing. I'll just write it down because I have to. And then I go back to study and I'll understand it a little bit more. But doing it by myself, I just don't really like that.

A responsible student, Bob will usually do as he is told to do by his teachers. When he is disengaged, he will assert minimal effort, "because I have to." Under certain conditions, though, Bob puts forth an extra effort to understand the material. When he is trying to understand the topic under study, he is showing evidence of learning orientation (Dweck, 1989). Bob will work to engage in real learning when he chooses to work toward understanding.

Classroom Climate

Humor

During my first interview with Bob, he seemed to come to the table with some issues he wanted to get off his chest. As I showed him where to speak into the tape recorder microphone and we practiced to ensure good sound quality, Bob was bubbling with anticipation. He was ready to tell me the type of assignment he liked, and also prepared to describe the type of teacher he liked.

Bob: I usually like to do hands-on things.

John: Okay.

Bob: And things that can be kind of funny. If you make it to where it's fun, it'll make students including myself work harder.

Bob's desire to work with hands-on activities is consistent with Hootstein (1993), who claims that adolescent students need to pursue interests in active ways; they prefer socializing and working with their hands rather than merely listening or reading. In addition, Bob's comments that he likes "things that are kind of funny" is consistent with the position of The National Middle School Association (1986), which has identified a sense of humor as one of the most important personal traits needed for an effective middle school teacher. I have observed Bob make comparisons between the curriculum and humorous experiences he has had on a number of occasions. His perception of the teacher's willingness to engage in humor is an important ingredient in Bob's willingness to engage in reflection. This, Dewey (1916, 1933) might say, is an important ingredient in motivating Bob to engage in his own learning.

The Room is More Colorful

When asked to review his transcripts for a member check, Bob added to his other comments. He thoughtfully described his perception of divergent classroom climates.

Bob: If the teacher is dull all of the kids are dull and it causes the atmosphere to be dull.

Yet a class with an exiting (sic.) teacher causes the kids to be kind of rowdy but the room seems more colorful.

Small, Dodge, and Jiang (1996) would argue that the "dull teacher and the dull classroom" described by Bob are symptoms of a lacking stimulus in the classroom, and are likely to lead to boredom and possibly off task behavior. Bob's description of an exciting classroom as "more colorful" is an indication that excitement in a class

academically arouses him. This is a condition that Keller (1983) links with generating and sustaining student interest. In this way, an exciting classroom climate is complementary to the student interest category, while a dull classroom climate is detrimental and likely to lead to disinterest, possibly resulting in the state of boredom.

Teacher Enthusiasm

Though teachers might display their like or dislike for a topic in various ways, Bob notices how his teachers appear to approach a subject in class. A teacher's enthusiasm for what he or she is teaching has a marked impact upon the way a lesson is perceived by Bob.

John: Okay. What makes one teacher's lecture or one teacher's discussion or one teacher's talking about lessons – what makes one teacher different from the next?

Bob: One teacher might – if a teacher dislikes it, she's not going to teach it in a very good way. Because – and if the teacher does like it, she'll go more into it and we'll get more from her or him than just her disliking it and just reading or just teaching it very slowly and more boring. So if the teacher likes it, it's easier and funner. If the teacher doesn't, you can usually tell.

John: Uh huh.

Bob: And it just – the way they teach it is a whole lot different if they don't like it.

John: If they don't like it, how do they normally teach it?

Bob: They'll go real boring and they go a lot – they just act like a student would if they didn't like it. They don't really want to do it, but they know they have to, so they'll teach it. But it's not going to be much fun.

The teacher plays one of the largest roles in setting the tone for how the Bob perceives the classroom climate. Enthusiasm is another important teacher trait endorsed by the National Middle School Association (1986). In Bob's case, a teacher's enthusiasm is contagious. On the other hand, a teacher's disaffection with the subject can give birth to a contrary influence on Bob's motivation.

Respect

The teacher's treatment of the students in class influences a number of Bob's motivational issues. The relationship Bob perceives his teacher has with students is very influential on Bob's willingness to work hard in a class. The perception he formed concerning one of his earlier math teachers was a particularly troublesome stumbling block for Bob.

John: So in [math] class you had some behavioral issues?

Bob: Yeah. Just last year. I don't know why, but I had a strange teacher.

John: And you had a strange teacher. Describe the teacher, describe the class situation.

Bob: She treated us with respect, but if, just certain, small little things, she'd lose all of her respect for us. And then that would make us angry and we wouldn't want to show respect to her. So if she didn't show respect, then we wouldn't want to reflect it, give any respect to her. And I guess that is what got a lot of people in trouble.

John: Uh huh. And how would she show disrespect?

Bob: Just the smallest things. And she would yell at us like we were still in elementary school. Just like we hardly knew anything, the way sometimes she treated us.

John: And you reacted how?

Bob: I got pretty frustrated with that because I don't like somebody that treats me like I'm a lot younger than what I actually am. So if a teacher treats me my age and a fair punishment for the crime, then I would be a lot happier with that rather than just acting like we're elementary school kids.

John: And so this treatment – is it the treatment of the teacher toward you? Was it the frustration with the subject matter?

Bob: Well, the treatment to the students, if it doesn't show much respect we won't show respect to her and we won't want to listen to what she's saying. So there were a lot of bad grades in that class because, I guess, pretty much the way she treated us and it was hard. But just the fact that the way she treated us just made us angry and not want to listen to what she was saying because we knew that if we said, if we like whispered to somebody, she'd get all angry and go into certain things about why we talk in class and stuff. It just makes it a lot more difficult than what it actually is.

This math class lacks the characteristic that Oldfather (1993) calls “honored voice.” The negative influence Bob's perception has of his math class' climate is powerful. Bob was troubled by the teacher's lack of respect for students. He mirrored her attitude, and perceived the atmosphere of the class to be negative. His perception of the teacher and the climate of the class bled into his perception of other aspects of the class.

John: Uh huh. I did look back at your grades and I noticed that your grades were quite a bit lower in math last year than they are so far this year. Quite a bit lower in math than they were in your other classes last year. What – anything more about your

relationship with this teacher, the environment of the classroom, the climate of the classroom and the how the teacher influences that?

Bob: Well, like I was saying, if the teacher doesn't treat us like we should be treated, it'll change the whole atmosphere of the classroom and everyone doesn't really want to do much of her work that she's – so we won't – just the fact that, the way she's treating us can change a whole lot of things, including our grades and stuff.

John: Uh huh. If you'd had a teacher that would have treated you with respect, how would that have changed – you know, you've also mentioned it was difficult. How would that have changed the difficulty of the work?

Bob: If she treated me with respect, I'd like the person better so I'd pay attention to what they're saying and it'd become a lot easier in having to deal with the way she treated us, rather than the work.

Bob's motivation in this class was adversely affected by a dilution of relationship between teacher and student. This is consistent with the findings of Oldfather and McLaughlin (1993). This negative influence will be established thoroughly within the remainder of this chapter.

Honored Voice Part II

Stevenson (1992) claims that every child wants to be liked and respected. Bob shared some concerns with the way he perceived that some teachers had treated him during his tenure at the middle school. Since he expressed such strong opinions on the matter of respect, I asked him to expound upon them in his thought journal as he reflected. My students chose to use notebooks for their thought journals, but always had

the option of emailing me when they chose. One night in early February, Bob dispatched the following email:

Hey, Mr. Culligan. You had asked if I put the teacher thing in my notebook I said yea but, as you most likely know I didn't. So here it is.

The way a teacher acts really affects the students willingness to work. Say like last year I had a math teacher that really wasn't someone I liked. So that resulted in me not really wanting to listen to her and that caused me not to make the best grades in the world. I had A's in all of my other classes yet in that one I had a C. This year I don't dislike my math teacher and that has resulted in a good grade.

Respect is a great factor in getting students to listen to a teacher. In the mind of a student they think that if the teacher shows no respect to them why should they show respect to the teacher? So if the student feels respected the student will respect his/her teacher and listen to them and then you have a good student.

Just the way the teacher acts just really makes an impact I just can't say how much it actually does effect (*sic*) the students.

This responsiveness to students through respect is the element of the classroom Oldfather calls honored voice (1993). In Bob's case, when he perceives a lack of respect from the teacher, he is not likely to place a high value on what the teacher regards as important. For Bob, mutual respect opens up a two-way line of communication.

One aspect of honored voice that Bob encouraged teachers to incorporate in their repertoire is the treatment of students as individuals. Bob expresses this in another of his emails.

Hey, Mr.Culligan. If you want me to stop e-mailing you then give me back my notebook! I'm just playing. I was thinking and I came up with a thing to tell you.

This ties in with how the teacher treats the students. What I like and I'm sure others do to is when the teacher will congratulate you or just talk to you individually. When a teacher talks to me saying good things about me I like them and that results in me listening to them teach. So just simple things like that can get you respect from a student and as I have said before when a student likes the teacher they will listen to them.(most of the time anyway).

Again, if you don't give me my notebook back I will dislike you and not listen! I'm just joking.

Bob's comments mirror the experience described by Colsant (1995). As a high school French teacher, Colsant was met with detachment and resistance until he listened to his students and began to see them as individuals. He became more responsive to the students first by listening to them. This change in demeanor led to a change in his relationship with the students and the climate of his classroom. A teacher's basic respect for Bob's humanness and individuality paves the way for his willingness to engage in learning.

Smaller Class Sizes

Bob discussed the size of a language arts class he had during one of his middle school years. During this class period, students on Bob's academic team who were labeled "probe," or "gifted," left the regular team teachers to attend language arts with a teacher who specializes in gifted education. One of the inadvertent side effects resulting from the removal of the gifted students was the lowering of class sizes for the non-gifted students.

Bob: But she made it really fun because it was a small class because all the Probe kids went to Probe and when it's smaller, I do much better.

The teacher had no influence on the size of Bob's class. Later I asked Bob why he did much better in a smaller class, and he told me that the teachers usually seem like they are in a bad mood when there are too many students in the class, but when there are fewer, they joke more with the students. This change in the teacher's demeanor had a positive effect upon Bob's perception of the class.

Perceived Student Needs

Scales' (1991) list of adolescent student needs includes several that Bob professed to be important to him. They include physical activity, positive social interaction with adults and peers, and creative expression.

Hands-on Activities

Consistent with Hootstein's (1993) position that middle school students need more hands-on activities, Bob told me that he enjoyed working with his hands. He goes into more detail and provides an example of what he was discussing.

Bob: Science is usually one of my favorite subjects so I like to go in there and I look forward to that class.

John: What about the class makes you look forward to it...?

Bob: Well, we learn about more interesting things, rather than math and stuff. So like we'll do labs and stuff that make it fun.

John: The labs.

Bob: Uh huh.

John: Again, that seems to come back to something you keep mentioning, which is what? What about the labs?

Bob: It just makes it more fun and you want to – and when you're doing a lab and you have to write this stuff down, you learn it better than just sitting there writing it rather than actually doing it hands-on.

Bob initially tells me that he likes science because he is able to learn more interesting things, but he clarifies the statement by saying that “we'll do labs that make it fun.” In conjunction with my observations and with other statements Bob has made to me, I surmised that it was not the content in science as much as it was the teaching methods that influenced Bob's feelings for the class. As an active adolescent boy, Bob has a need to participate in physical activity.

In science this year, the plethora of labs provides him that opportunity. While learning about erosion, the students in Bob's science class were given a Tupperware container with 100 grams of small rocks. They were instructed to shake the container until they tired. Bob's tireless nature was suited perfectly for this type of lesson. Smiling

and laughing frequently during the activity, he was able to create erosion with his own hands and observe the process directly.

Textbook Versus Active Learning

On the flip side of active learning is passive learning. Bob has expressed distaste for methods on a number of occasions that involve passive learning. He associates most strategies that involve a textbook as passive (Note: Though Bob regularly bashes textbooks as “boring,” there are some methods that teachers have used which have been more successful in motivating him than others. Some of these activities Bob even considers “fun” or “interesting.” The majority of these will be addressed later during the student interest section). Below, Bob describe his perception of how the difference between using a book and participating in a lab.

Bob: We’ve done a lot of labs in there, like classifying rocks. But that’s not usually very much fun. But—

John: No?

Bob: Well, it’s igneous rocks and we just look at the crystals in them and put them into different groups, which isn’t that exciting. But it’s better than using all the textbook work.

John: How does the lab influence the way you learn?

Bob: It—we have to know certain things to be able to classify them, like the crystals in them. If they’re big, they cool slower. And we have to know those in order to classify them. So before we can classify them, we have to get all that information first.

John: So you say you’re classifying rocks, actual rocks. Do you hold them? Do you—

Bob: Yes. They're made from lava and magnum.

John: Where do they come from?

Bob: Either under the earth or on the surface. I don't know where Ms. Rocker got them, but she just gave them to us and said classify them by these certain things.

John: Pretend for a second that you had to do the same assignment using descriptions of rocks as opposed to actual rocks – descriptions that you get in a worksheet or a textbook.

Bob: It'd be a lot more boring because you don't actually see and hold the rocks, to actually look at what they actually do look like, rather than looking at words telling you what they look like. I'd rather hold them and observe them myself, rather than reading information from a textbook.

John: How much more about rocks can you tell after doing a lab than you could from doing a different kind of assignment?

Bob: You learn more about them by their texture and you can figure out if they cooled inside or outside the earth. And just being able to feel them tells you a lot more than reading the words.

Bob started out his comments by telling me that learning about rocks was no fun, but he went on to tell me about how effective the labs were in getting him involved. This is consistent with the positions of Scale (1991) and Hootstein (1993). A teacher who creates lessons providing Bob the opportunity to work with his hands is likely to get him involved in his own learning. Labs work better for Bob than passive seatwork. Why? Originally, he simply stated that labs were "better than using all the textbook work." Later, he went into more detail, explaining that the texture of the rocks helped him to

figure out whether they cooled inside or outside of the earth. Experiencing the texture of rocks would not be possible if his teacher used only textbooks.

Visual Learning

Bob dislike of textbooks is evident, but Bob talks about interacting with the material in the text by using graphic organizers.

John: Tell me about science, Bob.

Bob: Science is usually – is fun, but there’s a lot of textbook work involved. But usually it can be made a little bit more fun than just all textbooks because just different things that we do with the textbook.

John: Okay. Such as?

Bob: If we read it like and make a chart of what it’s talking about and write down just certain facts so we don’t have to read the textbook.

John: Uh huh.

Bob: We can just take the most important things out rather than everything.

Though this method is not necessarily interesting to Bob, it has a more engaging effect than a passive reading assignment. In order for Bob to decide what is important enough to put in his chart, he needs to engage in an inner dialogue. Bob’s comment that using charts helps the students “take the most important things out” from the book indicates an engagement with the material in an attempt to figure out what is important. It might also indicate that Bob has a strong visual/spatial intelligence (Lazear, 1991).

In order to meet Bob’s need for positive social interaction with peers (Scales, 1991), I might recommend that the teacher allow students to create the chart through group work. This would allow for the students to participate in social constructivist

dialogue, creating a group chart that reflects the collaborative construction of meaning (Oldfather and McLaughlin, 1993) as well as a collective understanding of what is most important to know.

Student Choice

Bob told me that, when I allowed students to influence the direction of a lesson about the Revolutionary War, it was a pleasant experience for him. This is consistent with Wigfield & Eccles (1994), who maintain that young adolescent students possess an increasing desire for autonomy. I asked Bob to tell me more about this.

John: So as you're studying about something in class, is what I'm asking – as you're studying about something in class, do you – do the students get to choose at any point what kinds of questions to ask or what kinds of parts of the war to talk about?

Bob: Yeah. We can ask certain questions even if they aren't really related. And then the teacher will get more into the question and more and more. And then it becomes a whole part of the lesson. So we get to choose some of the things we study.

John: Does that make you want to learn more?

Bob: Yeah. If it's something – I'll ask a question that I want to know something about and the teacher goes into it a lot, I like that. Because then I pay attention and I like to learn about it.

Classroom climate created by the teacher is an important ingredient in meeting student choices. A teacher that encourages students to ask questions does this by creating a certain climate. Oldfather and McLaughlin (1993) talk about shared ownership of knowing through epistemological empowerment.

From my observations of Bob, I have concluded that, when he asks the teacher questions, he does so seeking a sense of epistemological empowerment. While Bob is accommodating and assimilating (Piaget, 1967) new material within his personal cognitive structure, discrepancies often result, and questions are the natural result. In order to learn, Bob will attempt to make sense of the discrepancies. He usually begins his questions with descriptions of experiences he has had or movies he has seen (preexisting knowledge). He attempts to adapt his preexisting knowledge by assimilating and/or accommodating any conflictual information or aspects of the concept under study. This can be motivating for Bob if he perceives that a teacher will be willing to address the discrepancies. If a teacher's track record indicates that the students are welcome to choose the direction of the lesson, he sees it as interactive learning, and he is more likely to work at making connections between new material and preexisting knowledge.

Lack of Choice

On the other side of the coin, Bob had shared earlier that one of his teachers would regularly shut the students down when they attempted to ask questions in a class. This proved to be quite unmotivating for him.

John: Tell me about a class where you are not able to ask questions.

Bob: That class is usually not very much fun at all and the teacher will just go on and on. Some people raise their hands and then five minutes later they'll have to put them down because she just keeps going on and on about one certain thing. And one certain thing makes your attention just fade away. After about twenty minutes, you won't want to listen to her anymore.

If the teacher indicated that he or she was more interested in “getting through the material,” then Bob will simply write down his notes and move on without making any true attempts to understand and learn. During another conversation, Bob told me that he often studies content for tests in those types of classes but forgets what he learned almost immediately following the tests. When he feels this way, learning is not his goal.

Simulations and Role Playing

Bob made conflicting statements concerning “teachers talking,” or giving notes, during his interviews and conversations. I attempted to probe why sometimes he disparaged this teaching strategy while praising it at other times. After I asked my first question, it became apparent to me that my focus was off target. Whereas my question was focusing upon the teacher’s preparation and presentation method, Bob’s comments quickly reminded me that his main focus was not on the teacher, but on the students.

John: Okay. And is there a certain presentation method that’s better than others? I’m talking overhead, board, PowerPoint – anything along those lines?

Bob: PowerPoint notes help a lot, and then overhead – I don’t like the overhead. You never use it. It’s a good thing that you don’t. But usually if we do PowerPoint notes, and you’re reading what we need to write, it makes a good study guide and we learn a lot from that. Or you use certain people to act out something that’s in the textbook, it makes it – you learn more from that.

John: How have you acted certain things out that come from the textbook?

Bob: Like some people act like as a ship captain and then the indentured servants would want to come on so the captain would act like a captain would and the

indentured servant would be like pleading to go on the ship. Certain things like that.

During a lecture/notes situation, I often ask for student volunteers to act out certain historical concepts. The scene that Bob is commenting on above was part of a lesson that I taught back in early September. While explaining what an indentured servant was, I asked for volunteers to act as the indentured servants, a boat captain, and colonists looking to bid for indentured servants. Using one side of the room as Europe, the other side as America, the middle as the Atlantic Ocean, and a cardboard box as a ship, some of Bob's classmates briefly became historical characters. Bob's statement that "you use certain people to act out something...you learn more from that" is consistent with Bob's need to be active in his own learning (Scales, 1991; Hootstein, 1993). Bob's comments emboldened me to ask more about these types of "active lectures."

John: When you re-did your last – when you went and did the member check of your last interview transcripts, you wrote something in there about frontier warfare.

Bob: Yeah. We did frontier versus European style warfare. First we just did European. We threw Wiffle balls at each other. And then we went up into this little area of pine trees as the frontier people and the rest of them marched like the Europeans would. And it taught us how the frontier people had more of an advantage, even though they weren't organized, over the Europeans. And that taught us a lot about Lexington and Concord. Once we got to that, we realized that's what they did.

John: That's what who did?

Bob: The frontier people or the colonists.

John: The colonist? So in six months or a year, will you be able to tell somebody more about European style warfare and other things?

Bob: Uh huh.

John: How well will you remember that?

Bob: I'll remember it pretty well because I had fun doing that. And just the fact that it was fun, it makes me remember when we did it. And I also remember what information we're getting from it. So it makes it fun.

Role playing and simulations are recommended by Hootstein (1994). Bob's comments indicated that these teaching methods are effective in his learning. This reveals that he is not only a visual/spatial learner, but also a body/kinesthetic learner. In other words, he learns through activity. Lazear (1991) claims that, "learning by doing has long been recognized as an important part of education" (p. xii). That Bob considers these activities to be "fun" as well as a useful way to learn suggests that his motivation to participate reflects the student interest category as well as the student needs category.

Locus of Control-Student Efficacy

Student-Teacher Relationship Influencing Locus of Control

Bob indicated to me that one of his middle school math classes had been one of his most difficult and least favorite classes of his school career. He says that he struggled with math during that school year. His grades confirm his perception. He earned "C's" in seventh grade math. Bob's frustration with his teacher led to a lack of engagement. This lack of engagement was at least partially responsible for Bob's lack of understanding. Bob perceived that his inability to understand the concepts was out-of-his control, leading to some behavioral issues.

John: Tell me about how well you were able to do in math over the last couple of years and how well you're able to do in math this year.

Bob: The last couple of years the math is harder. Like seventh grade, I think that's probably the hardest math, learning the new algebra and stuff. But this year it's a lot easier because it's pretty much a review of everything, just a few new things in it.

John: So when you were learning the new algebra concepts, how frustrated did you get?

Bob: I got pretty frustrated. And I had an isolation seat because I'd always want to talk to someone next to me. So I sat by myself. And sitting by myself, my grade went up a few points. Just, I guess I paid more attention where I was sitting.

Though Bob did not do well in math, he perceives that he had the ability to succeed in math, and that the cause of his poor grades was external. In his mind, it was the teacher's fault. According to the attribution theory (Weiner, 1986), Bob's attribution of failure to an external source (the teacher) can cause a situational lack of motivation. Graham and Weiner (1996) would likely say that Bob's frustration and anger with his teacher are due to the controllability dimension of the attribution theory. His perception that the teacher was to blame led to his anger with her.

For Bob, the climate of his math classroom led him down the slippery slope from lack of engagement to lack of understanding, to poor grades and to eventual disciplinary issues. Though I could have placed this in the classroom climate category, Bob's perception of an external locus of control is really the hub linking the climate to lack of motivation and disciplinary issues.

Easy Class

Though Bob did not perform well in his earlier middle school math class, his overall perception of his math abilities remained stable (Weiner, 1986). With this perception in mind, he expressed a note of optimism concerning math during the current school year.

Bob: And yesterday we had kind of a free day. Like we did one big math problem then we passed out papers. And usually we'll take a quiz all the time, but every once in a while when you have a day like that, I look forward to that class after a day that you just do one problem and pass out papers and stuff. It makes me look forward to it.

John: What makes you look forward to it?

Bob: Just the fact that we won't usually be doing all this book work and it can be – it's an easy class this year.

John: Math is easy?

Bob: Uh huh.

John: How does the easiness of math affect your motivation?

Bob: Well, usually I can't do math, so when I can actually do it, I like to actually do it because I feel like I'm doing it by myself and I usually can't do it. So now I can and it makes me want to go to that class.

John: And you said it makes you feel like you can do it, so how does that – well, it makes you want to go to that class and it makes you want to do what with that work?

Bob: It makes me want to work really hard on math because I can do it and I want to show that I can do it real well if I work hard.

Bob's lack of self efficacy in his earlier math class might lead a casual observer to believe that he does not have the ability to do well in math. His subsequent self-efficacy in eighth grade math belies this. Locus of control is situational, but the stability of Bob's ability was not. His perception of his ability is more stable. Overall, he felt that he has stable math abilities that he predicts will result in better understanding and achievement than he was able to earn in the seventh grade.

Dealing With Adversity

Though Bob perceives that math is easier for him this year, the abstract algebraic concepts introduced in his math class can be challenging. In fact, certain assignments tend to be difficult for him.

John: We talked a little bit about math being easier for you this year and how that has affected the way that you go about doing math. How does a really difficult lesson influence you?

Bob: If it's really hard I don't usually want to do it that much so I'll listen to what she's saying, but if I can't do it, I'll get frustrated and I hardly ever learn anything from the math.

While earlier mathematic concepts might be considered concrete, the basic algebraic concepts taught in the eighth grade become more abstract. Wigfield, Eccles, and Pintrich (1996) maintain that adolescent students are in the process of developing abstract thinking skills. As each student develops at his or her own pace, certain concepts have the tendency to be more problematic than others. Bob's comments indicate that, when he

perceives the concepts are too difficult, he gets frustrated and anxious, and thus learns little. In these situations, he perceives the causality (Weiner, 1986) of his failure to be internal, but outside of his control. Keller (1982) would call this a lack of confidence in his ability. When confidence suffers, motivation is likely to decrease.

Competition

While commenting on his favorite types of assignments, Bob told me that he enjoyed working on poster projects. The reason he shared for enjoying this type of assignment was as enlightening as it was interesting.

John: Tell me about the kind of assignment that brings out the best in you.

Bob: Usually things with posters and you put things on it and stuff. That makes me want to do it because I look at it when I'm done and I'm like, "Oh, I did this good." So I like that.

John: Okay. "I did this good" makes you feel how?

Bob: It makes me feel good that I did it and I can do better than other people at it.

Bob's statement that he feels good about himself when he does a good job is an indication that this type of assignment is good for his self esteem and competency beliefs. His competitive comments took me by surprise. At first glance, this would seem to follow Wigfield and Eccles' (1994) position that teachers should create lessons that emphasize and celebrate individual progress. Looking closer and reading between the lines, it appears that Bob's self esteem may be increased at the expense of others—resulting from his perception that he can create a "better [poster] than other people." This positive spin on competition appears to be at odds with Wigfield and Eccles' position that middle

school learning should avoid strategies that appear competitive. On a side note, Bob's comments also link self-efficacy with student interest.

Relevance or Content Value

Relevance From Teaching Strategies

Bob does not display an overt comprehension of what type of relevance his school subjects might have outside the school. In fact, they are quite concrete.

John: What will you use after you leave school that you're learning while you're in school?

Bob: Mostly probably the math and language arts, because in science we're learning about minerals and rocks and volcanoes which isn't something you really need to know that much about. So probably math and language arts.

Bob's comments that, "minerals and rocks and volcanoes...isn't something you really need to know about" shows that he does not perceive his science class to be relevant to the world outside of school. Keller's (1983) belief that relevance can come from the way material is taught is implied in Bob's comments here if it is combined with other statements he has made. Bob is motivated to learn in his science class when he is interested in the teaching method. Keller claims that instructors normally try to convince students that the content is relevant by making the instruction seem germane to present or future career. Bob's comments indicate that, should a teacher choose to focus upon teaching strategies, students like Bob will still be motivated.

Connections With Current Events

During Bob's seventh grade social studies class, he worked on a project that professed to enjoy. Enjoyment or interest in completing an assignment does not

necessarily translate into understanding or long-term learning. In Bob's case, interest and relevance might work hand in hand.

John: What about your projects did you like (in seventh grade social studies class)?

Bob: We did ABC's of a certain country if we were like studying the Middle East.

John: Uh huh.

Bob: I did Afghanistan. And we would do like "A" and then we'd write a fact that starts with "A" about Afghanistan and draw a picture and stuff.

John: Well, that's kind of an interesting thing. I want to talk a little bit about that. Last year when you did (the project on) Afghanistan, how did you feel about it...last year as far as being important, or as far as thinking that this was going to be something that would be useful?

Bob: I didn't think last year that this would be important out of school. We just picked a number and she gave us the country.

John: Uh huh.

Bob: So I figured that just doing the project, you'd get a lot of information.

John: At this point do you remember different things about Afghanistan that you learned last year?

Bob: No.

John: You don't.

Bob: I can't remember.

John: Okay. If you were to do this project this year, and it turned out to be Afghanistan, how would you approach it differently because of world events?

Bob: I would get different facts than what I did last year, because this year I would probably get stuff about their military so I'd know what's going on and their fighting rather than the native people.

John: Okay. Would it be something that you might engage in more?

Bob: Yes.

John: How so?

Bob: Because all the stuff that's going on with that country, I'd like to learn more about it so I know what they're talking about.

John: Okay. And last year, how interested were you in knowing what was really going on?

Bob: I wasn't very interested in Afghanistan due to the fact that it didn't influence me at all.

This interview occurred in the wake of the September 11, 2001 terrorist hijackings and attacks on the World Trade Centers in New York and the Pentagon in Washington DC.

The United States was fighting the Taliban in Afghanistan, and was involved in a furious search for the fugitive terrorist leader Osama Bin Laden. America was inundated with coverage of news from and about Afghanistan. Suddenly, it had become one of the most significant places on the globe. His answer shows that the strength of a student's perception of the relevance of content may be able to overcome other non-motivational issues. Hootstein (1995) claims that relevance is really just personal meaning, and that it is inherent in subject matter only to the extent that students have sufficient prior experience that they can relate to it. During the seventh grade lesson, there was no

personal meaning inherent in Afghanistan. After the September 11th attacks, Bob had experienced an event that created personal meaning. Afghanistan became relevant.

Lack of Respect Versus Relevance of Concepts

The possibility of Bob perceiving material he learns in school as relevant is born from his perception of the situational classroom climate. While discussing the climate of his negative math experience, Bob told me that if a teacher punishes him fairly he feels more respected, and in turn respects the teacher more. On the other hand, when a teacher treats him disrespectfully, he loses respect for the teacher. What remained unsaid at the time is that his attitude toward the subject as well as the disrespecting teacher is negatively influenced.

I was intrigued by the terminology that Bob used in his comments. My ears perked up when I heard Bob quote a familiar phrase. The phrase he cited was from a concept that he had gleaned from a student group during a recent cooperative group presentation in my class. He had taken the phrase from the group and applied it to explain the classroom climate of his previous math class.

John: You used...the words “the punishment must fit the crime.”

Bob: Uh huh.

John: I’m just – I kind of want to link a couple of things here because that sounds familiar.

Bob: Yeah.

John: Where did you hear that?

Bob: I heard that yesterday, actually.

John: You did?

Bob: Uh huh.

John: Where did you hear that?

Bob: In one of the group presentations.

John: And you remember that?

Bob: Yes.

John: What about that made you remember it and to actually use it?

Bob: Just the fact that I wouldn't want to be – I'd like my punishment to fit what I did, rather than just doing something small and getting a big punishment.

John: While you were sitting in class yesterday learning from the group presentation about fair punishments and things, what was going on in your head?

Bob: I was just thinking about what it'd be like if somebody shoplifted and they sentenced them to death or something, which would be very strange. So I was – that was kind of the things I was thinking. About what it would be like without that.

John: And kind of using that same stuff, but back to last year's class, when you were punished for things, did you feel like you were over-punished for things?

Bob: Yeah. Like she was trying to get the point across about – I can't – something in math. And then she said, "It's a reflection." And I said, "Like a mirror." And she got mad at me and sent me in the hall for like the rest of class. And then I didn't get the information I needed so I had to get it from someone else. Which I didn't really understand. But they got it once I said, "Like a mirror." They were like, "Oh, okay." And then—

John: So your answer was a sincere answer.

Bob: Uh huh. It wasn't like something that had nothing to do with anything. I was trying to get them to understand what she was saying, because they were having a hard time. I don't know why, but—

John: And so why were you sent in the hallway?

Bob: Because I said, "It's like a mirror."

John: And what did she perceive that you were saying? What did she think you were saying?

Bob: She thought I was just blurting out and trying to – for people to pay attention to me. She thought I was just trying to get all the attention. So she sent me out so no one would be disrupted.

Bob's concern over the math teacher's treatment of him show that he was trying to make relevant connections between what he was learning (the punishment must fit the crime) and his own experiences (the math teacher overreacting to his comments in class). Both Bob's sudden "blurting out" of the correlation and the teacher's reaction to Bob's comment illustrate a lack of respect toward one another, and seem to be consistent with earlier comments about the climate of the classroom. Other comments that Bob made indicate that his attempts to make the content relevant all but discontinued after the event described above. In this way, classroom climate has a huge impact on the Bob's attempts to ascertain the personal meaning behind classroom content.

Reading between the lines, I noted something else. Earlier Bob told me that he enjoyed the assignment that went along with the group presentations. While he was participating in this assignment, he acknowledged that his mind was engaged in making relevant connections between the concepts learned through the student presentation and

his own experiences. Bob was engaging in organization and adaptation simultaneously (Piaget, 1967). He made the effort to understand the universal concept behind the Eighth Amendment to the United States Constitution and transferred it to personal experience, thus was motivated to engage in true learning.

Student Interest vs. Disinterest

Passive Learning and Textbooks

Part of Bob's consistent theme was his dislike of passive lessons. During his discussion of seventh grade, he restated this aversion repeatedly.

John: I'd like you to think back to last year and I would like you to tell me about a typical day of school last year. Kind of take me through the day from the moment you get to school until the very end.

Bob: Okay. I get to school and we come in the classroom. We just sit and wait for the announcements like normal. And we'd go to each class. And we'd have bookwork and I didn't really like it because almost every day we had bookwork in one of our classes.

Bob often associates passive lessons with textbooks, calling it "bookwork." His memory of the seventh grade is centered upon an overabundance of bookwork.

Perception of Class and Bookwork

Bob uses the amount of bookwork a teacher assigns as a means for judgment on how interesting he perceives a class to be. This perception had a subtle but powerful influence.

Bob: And that (language arts) was pretty fun because my teacher liked to make it fun and we hardly ever used our books. I think we only used our grammar book for like one week during that year.

Bob's perception that the language arts teacher liked to make class "fun" is clearly associated with the amount of textbook work he remembers partaking in. I wondered how Bob's view of textbooks influence his motivation to engage in learning.

John: You've talked about textbooks quite a bit. Tell me what your feelings are about those.

Bob: They're just incredibly boring and I can't really do much with them so all you do is read them. I don't really absorb much information from them.

John: Okay. What kinds of things help you absorb information?

Bob: Like if someone's teaching it and they like make it funny and it keeps your attention rather than just reading a book.

Later, I asked Bob what type of assignment brought out the worst in him. Typical of his other responses he discussed textbook assignments.

Bob: Probably reading a chapter in a book and outlining it.

John: Okay.

Bob: I don't like to do that, so I don't really work that hard on it.

John: Uh huh.

Bob: But I'll still do it. I just don't really want to.

Bob's comment that outlining a chapter from a book brings out the worst in him is contradictory with other comments he made. When I asked him about this, he told me

that outlining a chapter forced him to think more, but that his earlier teachers used them so much that they became unbearable.

The dislike of textbooks that Bob consistently describes negatively influences his motivation to actively engage in the assignment. Small, Dodge, and Jiang (1996) claim that the method of inquiry is an important aspect of gaining and maintaining a student's interest. Gaining a Bob's initial interest is not enough. An activity that Bob is interested in clearly influences his perception of the content. On the other hand, Bob views textbook assignments negatively, and tends to approach work associated with them in a more passive manner. Consistent with Schug, Todd, and Beery (1984), the passive nature of textbook work disinterests Bob, and he doesn't "work that hard on it." Consonant with Small et al., colorful instruction that incorporates a variety of attention gaining and maintaining strategies would likely be more effective for generating Bob's interest and preventing him from becoming bored.

Textbooks and Lack of Engagement

With Bob's admission of his passive reactions to textbook work, it seemed important to probe this deeper. Bob turns in most of his work consistently, and from all outside appearances (including grades), he does pretty well. Some comments he made to me indicate, however, that making good grades on particular assignments does not necessarily lead to long-term learning and retention. In other words, completion of assignments and good grades do not always indicate engagement in learning.

John: Okay. Tell me a little bit about your science class (last year).

Bob: Okay. Normally we would just read a chapter and then outline it and do vocabulary. That's usually all we did. And then we'd take a test like every month or so. So it went pretty fast. But it was book work so I didn't really like it.

John: Okay. And not liking it does what to your effort?

Bob: I don't really want to do it and then I don't really absorb what it says, knowledge. When I'm reading a textbook, I'll just kind of just be looking at the words rather than actually reading it.

John: And so your understanding suffers?

Bob: I'm understanding it, but I don't really take it in...

Bob comments that, while completing book work, "I don't really absorb" knowledge and "I don't really take it in." He also says, "I'll just be looking at the words rather than actually reading it." These are Bob's ways of saying that, during this type of assignment, he is not engaged in learning—his focus has become more achievement oriented (Dweck, 1989). When his focus is mainly achievement oriented Bob is not trying to understand anything. In fact he is simply muddling through the assignment to get it done with as little effort as possible. Later, I probed deeper.

John: Tell me more about textbooks, again. If we run back to textbooks. Do you have a long attention span with textbooks?

Bob: No. But if I'm reading it, I'll read our whole assignment that we have to read, but I won't really get the information that I really need from a textbook.

Bob acknowledges that he perceives that the information in textbooks is generally the kind that he does not actively seek. He knows that it is there, and he knows that he has the ability to get it. He just does not want to. Bob's comments are consistent with Webb

and Baird's (1980) assertion that "you cannot give an answer to someone who has not asked the question. Bob knows that "the information" is in the textbook, but is not usually interested in attaining the knowledge in that fashion.

Engaging Textbook Activities

Acknowledging that textbooks are a part of life in school, I attempted to root out some insight from a card-carrying textbook-hater to find out which approaches might be more effective to engage his mind.

John: What kinds of things have teachers done with textbooks to help you to engage more in reading the textbook?

Bob: Outlines. But outlines aren't fun, but when you do them, you actually – when you're writing down the information, you get it better than reading it.

John: So outlines?

Bob: Uh huh.

John: Are they helpful?

Bob: Yeah, they help, but I don't usually want to do them. I won't get the information quite right then, but when I go back to study, it makes a real good study guide.

John: So the organization is better.

Bob: Yeah. Rather than just reading the whole chapter.

The use of outlines by teachers is the first thing that came to Bob's mind. It is interesting to note again that Bob is indicating that he prefers to be more active in his learning rather than a passive non-participant.

When Hootstein (1993) suggested that teachers create lessons that allow students to be more active, he was not recommending outlines. On the other hand, the creation of

an outline requires Bob to actively read and make judgments about the material that is within the reading—in a sense, forcing him to engage. His assessment of outlines is by no means a ringing endorsement, and is inconsistent with earlier comments that he had made.

Textbooks and Gaming

Though outlines might persuade Bob to engage in reading at a minimal level, I triangulated through my classroom observations that there was more he wanted to tell me. I thought that perhaps I had not asked the right question, so I probed deeper.

John: Are there any type of games that you've used in the past or any kind of gimmicks that a teacher's used?

Bob: Yeah. We've used certain games like Jeopardy or Who Wants to be a Millionaire, where we write down our own questions and when we're writing them down, we get the answers to the questions. And then when we're playing the game and you hear people saying the questions and answers, you get it more if it's a game, rather than just—

John: So when you play the games, based upon the same information in the textbook, what are you doing during the game?

Bob: It keeps your attention and it makes it more fun to learn about it. But during a game, you don't usually let your attention go away.

John: I see. And before the game starts, while you're actually looking through the textbook, knowing that the game is going to happen later, do you do anything different with the textbook?

Bob: Yeah. I'll try and get good questions so if I get to read the questions off, it will make it more fun for the people that are answering the questions, make it a little harder. And just the fact that we're going to play a game with all the questions, I like to get good questions.

John: Knowing that you might be a contestant in the game, do you have to know something more about the textbook than you would, say, outlining it or something?

Bob: Yeah. I'd probably go more into what it's saying if I'm going to be a contestant because people like to make the questions really hard, so knowing that I might be a contestant, I'll read it through real well so I'll be able to do real well as a contestant.

John: Do you get it more than way?

Bob: Uh huh.

John: Or does it – is it something that you will eventually forget anyway?

Bob: I'll get it more that way rather than just reading it and nothing fun about it.

Bob is discussing the Who Wants to be a Millionaire game that I use in history class.

Before we play the game, students must first read a selected passage from the textbook.

Using the content in the passage, students create a series of ten questions. Just like on the popular television show, the early questions are made to be easier, and gradually become more difficult until the final, most difficult question. When students are finished creating their sequence of questions, they begin to scour the material in the selected passage, trying to discern the most important concepts and to memorize as much as they can. The

possibility that a student might become a contestant in the game is intended to actively engage students in the reading.

After a predetermined period of time expires, the game is ready to begin. I will orally ask a difficult question (I call this the fastest finger question), and the first student to answer it correctly becomes the first contestant. This contestant is called the “primary contestant.” Seeking to include as many students as possible, the primary contestant may bring two other students to participate in the hot seat with himself or herself. I randomly pick another student in the class to read his or her questions to the contestants. I also have one other student run the computer program. Using Microsoft PowerPoint, I created a Who Wants to Be a Millionaire template with many of the original sounds from the television show. Students who play the game may win up to six bonus dollars at the “one million dollar” mark. These dollars are used as extra credit points, and must be shared among the contestants.

Bob’s comments about the Who Wants to Be a Millionaire game show that his perception that the reading will lead to something fun motivates him to interact with the material in the book. He reads the content more carefully in his attempts to make the game more fun. Bob perceives that he can do this by creating fair, but difficult questions. During one of my participant observations, I noticed that Bob continued to read the material in the textbook even after he had finished creating his questions. His competitive nature motivates him to study hard so he can be successful if he is lucky enough to be a participant on the hot seat or in case a contestant has the need to “poll the audience” or “phone a friend.”

Bob told me that while reading the book in preparation for the game, he tries to think from the perspective of the others in the class. He does this by asking himself, “what kinds of questions will the other kids ask?” While he is thinking like this, he is engaging at a higher level than he does during a passive lesson. Once again, it is not necessarily the content that energizes him, but the teaching methods. In addition, his trust that the teacher will provide the class with an enjoyable assignment after the reading is important to note. This trust reflects the classroom climate and possibly the needs section.

Students Teaching Students

After disparaging textbooks once again, Bob begins talking about a jigsaw lesson I created for my social studies class while we studied the Constitution.

John: Tell me more about your social studies class.

Bob: Social studies, we hardly ever do book work, which is a good thing because it keeps – my attention can stay. I have a longer span of attention when it’s the teacher talking and not the book, just talking to it.

John: What does the teacher talk about?

Bob: Lately just the Constitution, which isn’t very exciting, but my mind doesn’t go off of it.

John: So while you’re studying it, it’s not the content itself? The material is not interesting?

Bob: No.

Once again Bob displays his aversion to textbooks. Once again, he uses the amount of textbook work in a class as a means of judging his interest in the class. Bob’s comments that, “the Constitution...isn’t very exciting” seemingly conflicts with his next comment,

“but my mind doesn’t go off of it.” Bob’s comments are once again consistent with Small, Dodge, and Jiang’s (1996) claim that teaching methods are an important component of gaining and maintaining a student’s interest.

Group Work: The Good and the Bad

After splitting the class into six groups, I randomly assigned each group specific pieces of the Constitution or the Bill of Rights. Each group’s task was to read their particular section, understand and interpret the section, then teach it to the rest of the class. Consistent with Slavin’s (1991a) recommendation that successful cooperative groups need group goals and individual accountability, I imposed only two rules. One, each person was responsible for doing his or her fair share, and two, each person in each group was responsible for understanding the group’s entire section. Individuals became accountable for understanding the material during the question and answer session of the group presentations.

Each group chose to go about their business in their own way. Some groups broke apart their section into smaller parts, then assigned one individual to read and interpret each section. Upon completion, each person taught his or her subsection to each other before teaching it to the rest of the class. I observed groups talking through some of the more difficult concepts. Other groups chose to orally read through their entire section together and discuss the meaning of each subsection. Bob’s group chose to use this method.

John: When you were actually preparing the material, tell me about the group that you worked with?

Bob: The group I worked with had a couple of people that just kind of sat around and watched us. And one person would read me what to write down so I would just write everything down. And when I'm writing everything down, it just helps me get the information better.

John: Did you all discuss it, what it means, or anything like that?

Bob: No.

John: So a person just told you what to write and you wrote it?

Bob: Uh huh. Well, we talked a little bit about it. I read out the notes and we told each other the certain parts we'd read. But we didn't really talk about it much.

John: Now, how about these guys that sat around?

Bob: They just didn't have anything to do, so we just let them read a couple things off of it.

John: Is that pretty typical of group work?

Bob: Yeah.

John: And how does that, I mean, being somebody who actually works, what does that, how does that make you feel about group work?

Bob: Well, I enjoy it better than individual work, but I don't like when a couple of the people just sit there and watch. I like to spread the work out. But usually every time in a group there's somebody that doesn't want to do it, so they won't do it and they won't help.

These comments show that group work may be motivating to some, but to others it may appear to be an opportunity for some to disengage completely. Bob's perception of the "couple of people who just sat around" conflicts with his description of the roles each

played in the assignment, as well as my observations of what actually occurred.

Regardless, Bob's perception that two of the boys in the group did not pull their weight could have led to hard feelings among the participants in the group. Teachers need to be careful with how they use group work and how they design the actual groups. Though Bob did not play the leadership role in the group, he chose to actively participate by "writing the stuff down" for the group presentation.

As Bob continues with his description of group work, his comments show that the influence of group work is complicated. There are both positives and negatives associated with this type of assignment.

John: Okay. What parts of group work that – what I'm trying to get is what parts of group work help you to remember the stuff and, you know, you're talking about you remembering it more as opposed to just reading it yourself. So what about that makes you remember the stuff better or like it better or learn it better?

Bob: When somebody's actually saying it and I'm working with my friends, it makes me want to work rather than being by myself and just hardly doing it. But when I'm with my friends and we can spread the work out and we all do some, it just makes it easier.

Consistent with Scales (1991), Bob enjoys interacting with his friends. His comments that, "it makes me want to work rather than being by myself and just hardly doing it" is evidence of his motivation to engage in learning. Bob's comments that working with his friends "makes it easier" in conjunction with his other comments show that group work can increase Bob's internal locus of control. The motivation to engage in learning through group work tends to cross the border into the student needs and locus of control-

student efficacy categories. Wanting to know which specific aspects of this lesson Bob found to be engaging, I probed deeper.

John: But how does it [the lesson] become interesting to you?

Bob: Just the fact that we'll be using that and that I don't know it and I'm learning it.

And it makes it more interesting than just assigning certain pages to read the Constitution, which isn't – I get it more like when we do those group – with the groups and we take notes on it, on the group presentations. I get a lot more from that rather than reading the Constitution.

John Why?

Bob: Just – it's – when I'm reading it, I don't really like to – I don't like it so I don't pay much attention to it. But when the groups are presenting and they're actually talking about it, I can get more information that way rather than reading.

John: So when you say, "get more information," what does that mean?

Bob: Like if I'm reading it, I won't hardly get anything from it. I'll remember some things but when we do the groups, I can – when I write it down – it gets – when I'm actually writing it, it goes – I learn it better than reading it.

Consistent with his admitted dislike for textbooks, Bob appreciated the jigsaw effort. He claimed that, if he had been compelled to read the entire Constitution, he would not have paid much attention. There would have been little motivation to engage in learning about Constitutional concepts. Bob's comments, "But when the groups are presenting and they're actually talking about it, I can get more information" is consistent with my observations. The expert student-teachers interacted with the class through question and answer sessions. Members of the class (including Bob) shared personal experiences that

they felt was relevant to the Constitutional concepts being taught. Bob's choice to become actively involved in this part of the lesson shows evidence social constructivist learning influences Bob's continuing impulse to learn (Oldfather, 1992).

Conclusion

Bob is an excitable adolescent boy who is constantly seeking opportunities for fun in his life. He views school as another opportunity for enjoyment. He goes to school with high hopes, always anticipating excitement, and is easily disappointed when reality does not meet his expectations. Bob wants to like his teachers, and is inclined to give them the benefit of the doubt—at least until he perceives their behavior as disrespectful toward him. It appears that Bob has been able to develop good relationships with most of his teachers. Under the few conditions that Bob developed negative perceptions of his teachers, it met with disastrous results. Bob's negative perception of the teacher led to negative perceptions of the class, leading Bob to disengage in learning and become involved in off-task and sometimes disruptive behaviors. The same controlling and disrespectful teacher attitude that Bob perceived to have instigated the problem only exacerbated the results.

In Bob's opinion, a good sense of humor is one of the most important characteristics a teacher can possess. Bob is a student who likes to interact with the teacher and the other students in a humorous, but relevant fashion. In classes where he perceives the teacher to be a stick in the mud, his mind does not work at its fullest capacity. When Bob perceives that he has developed a positive relationship with a teacher who has a good sense of humor, he seeks to engage with the content in order to make relevant connections to his own experiences. Sometimes these connections are humorous,

while at other times they are serious. It is vitally important to recognize Bob's perception of the relationship he has with the teacher. In circumstances where he is in a positive frame of mind, he opens himself up to learning. In circumstances he perceives as negative, he will not even attempt this.

With Bob's incessant pursuit of fun and excitement, it comes as no surprise that he is easily motivated by interesting assignments, and just as easily bored by those he deems disinteresting. When his interest is piqued, Bob becomes deeply engaged in learning. He has a natural interest in certain aspects of classroom content (e.g. war), but is often turned off by the learning methods (e.g. worksheets). On the other hand, he is naturally turned off by certain aspects of classroom content (e.g. rocks), yet becomes interested and engaged based upon the learning methods (e.g.. hands-on labs, games, simulations).

In the end, Bob's interest in most aspects of classroom content is a development in progress. He has the tendency to withhold judgment until the material is presented. When Bob respects the teacher (based upon his perception that the teacher respects him), he lends more credence to her words than when he does not respect her. A teacher who has earned Bob's respect is more likely to be able to convince him of a subject's relevance and appeal.

Once the classroom conditions are met, the most influential factor in Bob's motivation to engage in his own learning is the teaching method employed by the teacher. Bob is willing, even eager to engage in active, interactive, cooperative, competitive lessons, and others he perceives as exciting. The most practical perception Bob shared is

his eagerness to engage in learning of this sort regardless of his prior interest (or disinterest) in the content under study.

In summary, what reasons did Bob have for choosing to engage in learning sometimes while choosing not to engage at other times? Bob's main reason for choosing to engage in learning is to seek fun. His reason is more likely to be satisfied in a class where the teacher is enthusiastic, respectful of students, and has a good sense of humor. Specifically, Bob enjoys activities that are interactive, hands-on, creative, competitive, game-like, cooperative, and those that allow for student autonomy and choice. Bob was explicit in his reasons for choosing not to engage in learning. Bob is unwilling to put forth effort to learn in a class where he perceives a disrespectful teacher. In addition, Bob is unlikely to engage deeply in textbook work, worksheets, and lessons that lack creativity and choice.

CHAPTER VII

GREG

Introduction

Greg is a 13 year-old boy with a pleasant demeanor, and a strong willingness to please. Not overly athletic, Greg is average in size with light brown hair. He participates in community baseball and is a member of the middle school orchestra. Recently he had his braces removed and has a retainer that he manipulates like chewing gum in his mouth when he gets nervous. In class, Greg is an attentive and responsible student. He can always be counted on to complete his assignments as he is told, and will usually do an excellent job without protest. On more than one occasion, I have assigned inconsequential homework assignments and been surprised by the tremendous amount of effort Greg put into his work. On these occasions, it seemed important to Greg that I personally judge his work independent of all the others. His grades rank him in the top third of his class that consists of 377 eighth graders.

Though he is serious about his studies, he can sometimes behave immaturely as most eighth grade boys do. At times, he seems mature beyond his years, and at others, his behavior might be more accepted in an elementary school classroom. On most days, Greg is very self-aware—looking for peer approval and acting to gain the approval. During these times, he is more cautious about how he might appear to others, and tries to “act cool.” At other times, his oblivious behavior belies the little boy inside the teenager’s body.

During the current school year, I have had the opportunity to walk Greg and his class to and from lunch each day. In order to allow the students to blow off a little steam without bothering other classes (who are in session during our lunch period), we walk around the outside of the building. One day, Greg and one of his friends decided that they were going to get a little energy out (according to them), and began walking, knees bowed outward in a semi-squat, while waving their arms around wildly. A couple of other boys in the class copied Greg and his friend, while the rest of the class (including most of the girls) rolled their eyes at the antics. On another day, Greg was eating a cherry Popsicle on his way back from lunch, and upon finishing it, sidled up to me and told the joke that was written on the Popsicle stick. After divulging the corny punch line, Greg slapped his leg and harrumphed loudly, drawing attention to his bright red lips and shiny red teeth.

In spite of his average Iowa Algebra Aptitude Test (IAAT) scores, Greg's seventh grade math teacher recommended that he take the advanced eighth grade algebra class rather than the regular introduction to algebra class. His math score on the Iowa Algebra Aptitude test taken in the spring of seventh grade was only a 144 out of a possible 199. By no means does this indicate that he does not have the ability to learn basic algebraic concepts, but he fell far short of the Broken Arrow's minimum cut-off score of 160 normally needed to become an eighth grade algebra student. Typically, a student with Greg's score would have been placed in the regular introductory course. Greg has excellent work habits and a history of difficulty with timed tests, so his seventh grade math teacher met with his parents in the spring of his seventh grade year. Together they determined that the standardized test did not accurately depict his mathematic

abilities. Consequently, his lower score was overridden, and he was tracked into the advanced algebra course for his eighth grade math class.

Dweck (1989) would identify Greg's orientation to achievement as strongly skewed in the direction of performance orientation. Grades and "getting credit" for work is of great magnitude to him. Though he does well in school, Greg does not emit a strong love for learning. He has a pragmatic, goal oriented, "tough it out" attitude. When I asked him what he was thinking about during one of his classes, his answer was honest and forthright, but was in no way meant as a complaint.

Greg: Let's see. A typical day in math would be we would just go in and then basically we'd get in, get a worksheet and then I'd be like, "Oh great, another worksheet."

And then we'd take a quiz on it. Not a most fun day, but you have to go through it at school.

As a student who is greatly influenced by extrinsic rewards, Greg's comment that, "[he didn't have] a most fun day, but you have to go through with it at school," might be used by Kohn (1997) as an example of what is wrong with extrinsic rewards. Kohn claims that advocates of extrinsic rewards endorse a view of education that is unpleasant and a curriculum that is unappealing. Further, as Greg discusses his idea of what he perceives learning to be, he gives the reader a glimpse into his way of thinking.

Greg: Learning is basically getting, memorizing a subject, I would think, in your brain and just remembering it for your life.

John: Are you talking memorizing?

Greg: Yes.

John: Only memorizing?

Greg: Yeah.

John: So when you learn something in school, what's it good for?

Greg: Future preferences like maybe in college or high school, when we might review that later. I kept my notebook from science in seventh grade and it's helped me a lot for eighth grade because we've gone over a lot of the same stuff.

Greg is organized and openly focused on the future. He has long-term goals that include getting into what he perceives to be, "good high school classes," and getting into a "good college." Throughout this chapter, Greg will cite these goals as a mantra. He perceives that they are the basis for his motivation to achieve in school.

Classroom Climate

Though classroom climate did not appear to have a huge influence on Greg's motivation to engage in learning, I was able to identify two unique scheduling conditions that inadvertently altered the classroom climates. Each of these situations has influenced Greg. The lack of consistency Greg experienced one year in science prejudiced Greg's perception of the subject, while his experience with block scheduling subtly influenced his both his self-efficacy and his attention span.

Inconsistency

There are four teachers on a typical academic team at Broken Arrow Middle School, each one specializing in a particular subject. In the sixth and seventh grades, some of the academic teams are made up of two and three teachers. When there are two teachers on an academic team, each of them teaches two subjects. When there are three teachers on an academic team, each will usually specialize in one particular subject, while sharing the fourth subject. When I asked him to tell me about his least favorite

class in middle school, Greg described a science class that he had taken on a three-teacher team. Science was the shared subject.

Greg: My least favorite would probably be science because that's – I'm not really that interested in science. That's really, I mean like, it's not one of my favorite subjects, although it is one of my best subjects.

John: That's interesting.

Greg: Yeah.

John: So tell me a little bit about that.

Greg: Well, I mean, let's see. We usually watched – what we did in science, we'd go to a different teacher each nine weeks. Like I'd start out with Ms. Borlinger and then go to Ms. Hall and then go to Ms. Barker and then go back to Ms. Borlinger. So we'd have three different teachers every nine weeks for science.

John: Uh huh.

Greg: And we'd go through a different subject for every nine weeks. And like we'd go through the plants and the animals one nine weeks. And that's, I mean, I didn't really like it because we had to keep on switching teachers and then – I mean, we'd spend one nine weeks on each subject, but I mean, that's a little long, I think, on one book. But that's about it.

The teacher carousel that Greg is describing worked like this: During the first “nine week” grading period, he attended science class each day with Mrs. Borlinger. During this grading period, his class studied a specific topic (e.g. plants and animals). During the second grading period, the students in Greg's science class switched over to Mrs. Hall's class to study a different topic (e.g. genetics). During the third grading period, his class

moved on to study with Mrs. Barker to study something else (e.g. cell composition). For the final grading period, Greg's class returned to Mrs. Borlinger. For the first three grading periods, each teacher taught their particular topic to a new group of students. During the last grading period, students returned to their original teacher and studied a common theme (e.g. science processing skills).

Greg's dislike for the science class is at least partially based upon hidden characteristics he perceived from the teacher rotation schedule. Greg's perception that teachers are content experts and his performance orientation collaborate to influence Greg's efforts. Greg perceives that grades are a teacher's evaluation of what he has learned in a class. He is a student whose orientation is grounded in the belief that each teacher is an expert within his or her field. This belief is significant for his orientation, because the expert is the person evaluating him. In the science situation, he told me later that he felt like the teachers "didn't really know science." If a teacher is not an expert in her field, then Greg questions how the teacher can accurately judge his progress. Eccles and Wigfield (1997) claim that unfamiliar changes in student-teacher relationships are likely to undermine the sense of community and trust between students and teachers. Among the list of effects, an increased sense of alienation among the students was included. Perhaps this is the sentiment Greg was experiencing in his science classes during this particular year.

He also told me that the teachers "didn't seem like they liked science very much." This is significant to the classroom climate in two ways. First, Greg's perception that the teachers didn't seem to know or like science very much is accurate. In fact, Greg's teachers each chose their primary subject. They were math, social studies, and language

arts. Science was the only one not selected. The National Middle School Association (1986) has identified a number of personal traits needed to be an effective teacher in the middle school—enthusiasm was one of these traits. Greg’s perception of his teacher’s view of science content is consistent with his teachers’ view. In addition, Greg’s description of the teaching methods shows that the lesson plans were not as creative as they were in the teachers’ primary classes. These teachers who had been in the habit of preparing for only one subject (and teaching it four times) per day were obligated to prepare for two classes, one of which they were not overly enthusiastic about. Their preparation for the science class was not likely as consistent as their primary subject.

Block Scheduling

Greg also described his experiences with the alternating-day block schedule (Armiger, 1996) during one of his previous years in middle school. I asked him what his thoughts were about the schedule and first reaction was positive. He told me he liked it, but changed his mind right away. It turns out that Greg perceived there to be both positive and negative aspects associated with the block schedule.

Greg: I liked it. Actually, I don’t know. I kind of liked the days where we’d have all the classes because the day goes a lot faster and we get to have all of our classes.

John: What about it – you know, you said you liked it and then you changed your mind.

Greg: It’s just like the long class period. You have to sit through two hours when you—like when you’re in a class. And so you have to be in two hours in each class. So I kind of didn’t like that. But, although, if you watched a movie in like any class, you’d probably get to get through all of it.

John: Is there any certain classes that might have been better than others with the block schedule?

Greg: Yeah. Probably social studies and math.

John: Why?

Greg: social studies, because we'd always watch movies and we could usually get through... a couple of movies a day. And then for math, if we had tests, we'd get to – I mean, because we usually had a lot of tests in Ms. Borlinger's class. And we'd just have a lot longer time because her tests were really tough.

On one hand, the longer classes provided by the block schedule help Greg with his difficulty in taking timed tests. Consistent with the attribution theory (Weiner, 1986; Graham & Weiner, 1996), Greg attributes his success to his ability and efforts.

Throughout my data collection, there is only one aspect of Greg's schooling that he has acknowledged frustration (and failure to achieve well) with—timed tests. More information concerning Greg's problems with timed tests will be forthcoming in the student needs and the locus-of-control/student efficacy categories. This excerpt is included in the classroom climate section because the two-hour blocks provided Greg with more time, changing his perception of his ability to succeed on more difficult math tests. Since Greg considers his ability to be a key attribute to his success (or in the case of timed tests his lack of ability), his self-efficacy increased, helping him believe in himself.

Probing Greg's comments that the day seems shorter when they attended all four classes, Greg told me that two hours was too long to keep his attention. He commented that, "I could just fall asleep from the boredom sometimes." Salvaterra & Adams (1996) claim that the flexibility generated by block scheduling can be used to help place the

teacher in the role of facilitator as opposed to lecturer, leading to more creative instructional methodology, allowing for teamwork to develop. According to Greg, his teachers taught the block schedule in much the same way he had become used to in traditional scheduling. They lectured, assigned worksheets and bookwork, and occasionally assigned lessons interesting to Greg. The key for Greg was the amount of time he was expected to work at these assignments. The boredom he associates with block scheduling wore down his resilient capability to stay on task.

Performance Orientation and Classroom Climate

Overall, the different classroom climates did not appear to have a huge impact upon Greg's motivation to engage in learning. This is consistent with Greg's strong performance orientation (Dweck, 1989) and his "tough-it-out approach to school." Greg's steadfast belief in the influence of his grades on his future appears to override most of the cultural influences. Regardless of the classroom climate though, Greg showed a strong need to develop personal relationships with all of his teachers. This will be probed deeper in the student needs section of this chapter.

Perceived Student Needs

Getting On the Teachers' Good Side

During the five months of interviews, conversations, and journaling I shared with Greg, I learned important features of his perspective that I would never have known otherwise. Through the typical teacher-student relationship I develop with my students, Greg's need to connect with the teachers and gain their respect would have completely passed me by.

John: Greg, what else do you think that would be important for teachers to know about you? But I'd like to know about you, personally.

Greg: Okay. Probably about me, my personality, I really work hard in school and I try to do the best as I can, taking good grades and good grades on everything. Like I try to get an A on everything. That's usually my goal. And then to make friends with the teacher.

John: It's important to make friends with the teacher?

Greg: Yeah. Yes.

John: In what way?

Greg: Just, I mean, getting on their good side and basically like having a good personality, being social.

John: Do you think it's harder to do that with some than with others?

Greg: I guess you could say that, but like sometimes you can have some strict teachers and that's harder to like get on their good side. And usually on the middle all the way.

John: What do you mean?

Greg: By in the middle, I mean like you're not like her favorite student, you're like in the middle, like along with all the other kids.

John: Tell me about a class like that.

Greg: Probably, let's see, last year in math. That was, my teacher was really, really, really tough and really, really strict. And she was just hard to get on her good side. But eventually I did near like the last nine weeks of the end of school. And by getting on her good side, that also showed because it made me not be under so

much stress, as much stress, and I ended up getting my first A in the class that whole year.

John: Was it hard for you?

Greg: To get an A? Yeah. It was hard because I mean, I'm good at math, but it was also toughest, I think toughest year last year in math. It was just completely new stuff we have never gone over usually in math.

John: How does your relationship with the teacher influence your effort in the class and how well you do and other things?

Greg: Now?

John: Any time.

Greg: Basically you mean getting on her good side? Is that what you mean?

John: Sure.

Greg: Okay. Basically I didn't talk much in class. I studied a lot harder and basically she began to have respect for me.

Greg's need for positive social interaction with adults is consistent with Scales' (1991) position that adolescent students need to develop positive relationships with adults. For Greg, the need to "get on the teacher's good side" is highly significant. He is motivated to work harder and to show the teacher he has more insight into concepts under study so he can be recognized above all of the other students. An unrelenting boy, Greg is also motivated to work harder to maintain that respect once he perceives he has earned it. During another interview, I sought to find out why Greg needs this approval so badly.

John: With you, you talked...about getting on the teacher's good side. Is that only for grades?

Greg: No.

John: Well, then what do you do it for?

Greg: Friends.

Greg sees his interaction with teachers as an opportunity to make friends. He indicated that his need for “getting on the teacher’s good side” is actually a need for positive attention and a desire for friendship. This conflicts with a later statement that Greg made concerning this issue.

John: When you try to get on your teacher’s good side, what was the reason again?

Greg: Basically, so you can – I mean like, you won’t get as much in trouble in class if you like talked. If you’re like a troublemaker, if you talked once, you’d probably get a detention or something. So basically it’s that.

Greg shows valuable insight into human relations here. Whereas this statement might look like it conflicts with his other statements at first glance, it actually shows that his need for relationships is multidimensional. These dimensions are related, though. Greg’s high motivation is grounded in his long-term goals. His respect for the authority positions that teachers occupy is genuine. As part of this respect, he perceives that his teachers will have a strong impact on his future. Teachers are important people in Greg’s life, and he desires to develop and maintain strong relations with them.

Relationships between student and teacher are sensitive issues for Greg. During another interview, I asked Greg if he thought that volunteering for this study would either get him on my good side or keep him on my good side (if he already felt that he was there). Perceiving it as an accusation, Greg looked genuinely shocked, confused, and

wounded by my question. He told me that getting on my good side did not factor at all into his decision to volunteer.

Locus of Control-Student Efficacy

Confidence

Greg has an overwhelming confidence in his own abilities. While attempting to understand how he reacted under difficult conditions, I found that Greg was not intimidated. In contrast, he felt challenged to work harder when he had difficulty understanding something.

John: How does a difficult lesson influence your effort?

Greg: Let's see, it would influence my effort by just telling me I had to work harder and everything and not just slack off. Just work hard on the assignment and the subject that's really making it tough for you.

John: Have you ever had an assignment that you've looked at and said, "I can't do this."?

Greg: Let's see. Last year, seventh grade, I think we had a – it was either science or math – it was a math test. And that was probably the hardest test I've ever taken. I don't know why, but I mean like I usually study for my tests. I mean I studied for this one. I just didn't really get all of it. And, I mean, that was just such a hard test. Really hard.

John: How did that influence your effort?

Greg: I think I ended up getting a B on that test because I studied real hard on that test, and so, I mean, that influenced my efforts by telling me I had to study and really

just like get down and like just open the book and like open it and read over what we'd done.

Greg's confidence and pride are evident in his demeanor as well as in his comments. As we discussed his experiences in school, Greg showed that he has a strong internal locus-of-control when it comes to understanding content. He believes that the two most important influences on his ability to succeed are his ability and effort. Since Greg has confidence in his ability, the only factor that he sees left to influence his position is his effort. Greg is willing to put forth an effort that is concordant with the difficulty of the assignment. His internal locus-of-control in conjunction with the pride he savors in his successes is consistent with the attribution theory (Weiner, 1986; Graham & Weiner 1996).

On a side issue, Greg once again displays his strong performance orientation (Dweck, 1989). When I asked him how the difficulty of the content on the test influenced his effort, his comments that, "I think I ended up getting a B on that test because I studied real hard" is indicative of two things. One, Greg gauges the depth of his understanding through the eyes of the teacher. Two, he sees grades as the primary means by which his efforts and understanding are reflected by the teacher.

Getting Beyond the Bravado

When challenged with what he perceives as a fair ordeal, Greg is the type of student who rises to the challenge. Prideful, stubborn, and reluctant to admit that he has ever struggled, he indicated to me that he has not been overmatched often in his school experiences. Hypothetically then, I tried to create a situation to establish what his reaction might be.

John: I'm going to show you something here. I'm showing Greg a problem from a [graduate school statistics] multiple regression book. Greg, looking at this little formula here, if I was to give you about 15 or 20 problems in a classroom here and say, "Complete this," what would you do?

Greg: Ask a lot of questions and then just – if that didn't work and basically by looking at this problem, it would take a long time to learn about this, so basically it would just be over right there and I'd just like put my head down on the desk.

John: You'd put your head down on your desk? What would that signify?

Greg: Not getting it.

John: Uh huh. So you're asking me these questions about this and I tell you this has to be done this hour. Those are my answers.

Greg: Then I guess I'd just get a zero. Because if I didn't get the stuff.

John: Well, how would you react to not getting that stuff?

Greg: You should have taught it before.

John: What if I taught it and you just didn't understand it?

Greg: Then I should have came in earlier for like help or something.

John: Okay. And if you came in for help and you still didn't understand it?

Greg: I guess ask the teacher as many questions as I could until I finally understood it.

John: Well, look at it. Can you tell me what that is? You don't understand any of those symbols?

Greg: I understand the ratio symbol.

John: Oh, that's good.

Greg: And the square symbol and the subtraction.

Greg's initial reaction was disbelief. When Greg looked at the detailed formula, he blinked his eyes and smiled. He knew that this was a simulation and decided to play along. Not wanting to admit that he was defeated immediately, he tried to tell me that he would "ask a whole bunch of questions." Mid sentence, however, he recognized his false bravado and changed his tune quickly. Before he even paused to take another breath, he told me that he would just put his head down, signifying that he had given up hope of understanding.

Eventually, Greg stubbornly revisited his insistence that he would, "ask questions until he understood it." When faced with the ultimatum that he had to finish the problems in an hour, Greg sat back in his seat and folded his arms together. He was frustrated by the obvious no-win hypothetical situation I had created, and told me that he would "just take a zero." Quickly though, he wanted to make sure that I understood that the locus-of-control was beyond him, he blamed the teacher saying, "You should have taught it before." Keller (1983) would likely say that the external force (me) has taken away Greg's ability to control the situation.

Greg's multiple reactions to this impossible situation are again consistent with aspects of the attribution theory (Graham, 1986; Graham & Weiner, 1996). The most prevalent inferred causes of success and failure are ability, effort, task ease or difficulty, luck, mood, and help or hindrance from others. Greg initial reaction communicated his perception that the task difficulty placed potential success outside his locus-of-control. His stubborn nature led to a second glance at the content and a blustering attempt to infer that, with persistence, effort, and help, he might have the ability to become successful. In the end, Greg's acquiescence and accusation that the teacher "should have taught it

before” is an example of a lack of help by others. Together, the task difficulty and lack of help by others overrides Greg’s ability and willingness to put forth effort, signifying that his perception of the locus-of-control is clearly out of Greg’s hands.

Trying to bring the locus-of-control within his grasp, I added another dimension to the situation. I told him that the concepts had indeed been taught, and that he just missed it. In Greg’s resolute way, he repeated for the third time that he would ask questions until he understood it. He went a step further and told me that he should have come in early to school for help. Again, this shows that Greg’s confidence has resulted in his belief that success is only a matter of effort for him. Coming in early for extra help is one way he might be able to exert effort. Greg’s confidence is pervasive. He perceives all lessons as within his locus-of-control. He was intensely reluctant to concede that he was unable to understand something, even though he did not recognize most of the symbols on the page.

Anxiety

Though his scores were lower on the Iowa Algebra Aptitude Test than a typical algebra student, Greg’s current math teacher told me that he is progressing capably in advanced algebra. She also told me that his score was indicative of his perception that he does not do well on timed tests. Greg has discussed a similar concern with me as well. Doing well on standardized tests was even one of his primary goals for achieving in school. Greg’s math teacher believes that he psyched himself out before the Iowa Algebra Aptitude Test even began. I asked Greg about anxiety.

John: Have you ever been anxious in class? Do you have anxiety?

Greg: What do you mean by anxious? Like—

John: Stressed about things...

Greg: Oh, yeah, plenty of times. Especially on tests. Mostly math tests because sometimes math, for me, is really hard to memorize. So like the forms, standard form or “y” form.

John: So when you’re doing that kind of thing and you feel the stress, does that help your performance? Does it hurt your performance?

Greg: Just makes me nervous. It doesn’t really hurt or gain on my performance.

I disagree with Greg’s assessment of his performance while he is stressed out.

Fortunately for him, he does not appear to become stressed out very often. During my observations, I attempted to identify a situation that caused Greg stress. I was unsuccessful.

On the other hand, the large number of times he has alluded to his performance on standardized tests during our conversations underscores the importance Greg places on them. Greg’s seventh grade math teacher and his parents both recognized Greg’s tendency to become anxious during standardized testing, thereby causing lower scores, rendering them virtually useless in the assessment of Greg’s true abilities. Greg has indicated to me that he is also aware of his shortcoming in standardized tests, though I am almost certain he has not identified stress as one of the reasons for this.

At the present time, Greg’s anxiety is not a major issue in his current learning or motivation. In the future, though, it could prove to be important. Greg will necessarily be taking a number of standardized tests for admission to college. The high stakes at issue for these tests might make them more intimidating to Greg. In addition, as classes become more demanding and complicated, anxiety is a natural state.

Relevance-Content Value

Extrinsic and Concrete Relevance

Greg is a very forthright and concrete individual. Doing well in school is very important to him. He perceives school as a significant world of its own. Greg does not openly question the value of what is learned there, and in so doing, does not seek to understand the outside value of school content. With that said, the content he learns in school is not perceived as trivial to him either. In fact, he perceives the majority of content as very valuable—just not meaningful. Seeing himself as a good student, Greg works very hard to accomplish his goals.

John: Okay. What are the main things that you're trying to accomplish at school?

Greg: The main thing I'm trying to accomplish is to get good grades and do good on my standardized tests, make a lot of friends, and basically trying to – as good grades as I can, which would be straight A's.

John: So grades are the most important?

Greg: Yeah, grades. Grades.

John: What do grades mean?

Greg: To me, they help you get into better classes. I mean, although your teachers select you to go to your own classes, but if you do good in your classes, then you'll – your own teachers will put you in a better class usually. And so I think grades are important. And also, if I get straight A's, sometimes my dad will reward me with like a PlayStation2 game. And that's it.

Greg perceives middle school as interrelated with high school, and high school as interrelated with “a good college.” How the content of what he learns in school might

help him after that, he has yet begun to ponder. In fact, he is tremendously steadfast in his tunnel-visioned perception of how he might use the content he learns in school.

John: What do you think that you'll use after you leave school that you're learning while you're in school?

Greg: What, like what information will I use or as like what I get on like tests or anything?

John: Information.

Greg: Information? Probably – I know people have said the most important classes are math and science or science and language arts. One of those two. And so basically you have to just like remember all your information that you've remembered from the previous years in all subjects.

John: How about skills?

Greg: Probably test-taking skills, reading skills. mathematics.

Greg's performance orientation (Dweck, 1989) is evidenced by his tendency to focus on obtaining favorable judgments of his ability through grades, praise, and peer recognition. Greg perceives that the relevance of subject content generally comes from extrinsic factors such as grades. Seeking extrinsic rewards such as a Sony Playstation, he is highly goal oriented. Perceiving that his future classes will be determined by what he currently learns in school, Greg is motivated to engage in learning tasks with this in mind.

Greg's highly focused performance orientation is compatible with Atkinson's theory of achievement motivation (Graham & Weiner 1996). He tends to choose a course of action based upon the likelihood that it will lead to the ultimate goal, and his perception of the goal's subjective value. His ultimate goals are good grades, Playstation2

games, getting into good high school classes, and eventually getting into a good college.

In Greg's perceptual world, these goals have high subjective value.

Source of Performance Orientation

The strength of Greg's orientation led me to wonder how it became so firmly developed. Through the course of my questioning, it appeared that he perceived that his father's beliefs were the source.

John: What kinds of conversations do you have about grades at home?

Greg: With my parents, let's see. Basically my dad will say, "If you get straight A's, then we'll get you something special." So we'll make this deal about something. And if I get straight A's, he'll get me maybe like a PlayStation2 game. Or if not, if I get like all A's and a B, he'll just like give me like \$10.

John: And what about on the other side of that? Have you ever gotten poor grades?

Greg: No. The lowest grade I've ever had is a B. So I've never gotten a C. Actually, I did get a C one time in Science and my parents weren't too happy about that, but that's another story.

John: What kind of story?

Greg: My dad was pretty furious with me.

John: How did that make you feel?

Greg: Bad and wanting to get better grades.

Extrinsic factors that are both positive (e.g. Playstation 2, money) and negative (e.g. furious father) are motivating to Greg. These considerations influence Greg's motivation by artificially creating relevance to school that might not otherwise be present.

Remaining focused on his extrinsic goals, Greg is in the habit of working hard at understanding concepts and skills taught in school.

Greg mentioned his parents as a source of his motivation on more than one occasion as well. Briefly returning to Greg's need for "being on the good side" of adults at school, remember that he is willing to put forth a strong effort to meet and exceed expectations for the sake of the relationships. In the same way, Greg has sought ways to strengthen the bond with his parents. His perception of what his parents' value is important in maintaining that bond. Greg perceives that grades are important to his parents, and that increases his perception of the value of grades as well.

Removing Grades From the Formula

Greg was staunch in his perception that grades were the reason he works so hard to achieve at school. Seeking another avenue into his mind, I wondered how he believed he would react if grades were removed from the formula.

John: Greg, tell me, what would you do in school if there was no such thing as grades.

Greg: If there was no such thing as grades, I'd definitely not try as hard because it'd be basically, I think, according to me and my parents, it would be no use because you wouldn't be getting any – you wouldn't get as motivated as you were before. And, I mean, grades, I mean, if we didn't have any grades, I don't know. Because then you wouldn't get judged on anything.

Greg's comment that he wouldn't work as hard because, "according to me and my parents, it would be no use" is significant for two reasons. One, Greg truly believes that grades are the source of relevance in learning, and two, Greg reveals his perception of what he believes his parents see as important and relevant in school.

Greg Reveals Himself Through Triangulation

Though Greg said that he wouldn't work as hard on his academics if grades were eliminated, it is not necessarily true. In December, my social studies class participated in a mock trial simulation. The majority of students are usually excited about the opportunity to participate in this lesson. Before I assigned parts to volunteers, I assured the students that the nine major parts of the trial would require large amounts of time and effort outside of school. In addition, volunteers would not earn anything additional (grade-wise) for their extra work.

Greg was one of the first students to raise his hands to volunteer, and he was selected to be the judge in his class. In order to ensure a fair trial for the defendant, the judge needed to be familiar with the statements made by witnesses. In other words, there were several hours of outside work required of the judge. Though he was aware that he would receive no compensation for this extra work, Greg did a thorough job as judge. I asked him why he volunteered and put so much effort into it even though it was not graded, he told me simply that it "sounded like it would be fun." As judge, Greg took his obligations seriously. After the trial, Greg continued to talk with me about possible strategies that he felt would have been more successful than those used by the attorneys in the case.

During one classroom observation of Greg, I witnessed him volunteer to participate in a math simulation. Four of the students (including Greg) in the class were selected to illustrate a mathematical concept for the remainder of the class by acting out a skit in the back of the room. Cooperatively working toward understanding the concept with the audience watching was the goal of the students participating in the simulation.

All smiles, Greg put forth a strong effort and appeared to have a good time during the activity. As with the mock trial, Greg received no extrinsic compensation (gradewise) for his extra efforts during the math simulation. Again, I asked him why he volunteered, and his simple answer was that it “seemed like it would be fun.”

Both of these examples are consistent with Keller’s (1983) assertion that relevance can come from the way material is taught, and not necessarily from the material itself. Greg was motivated to engage in learning by the creative methods used to carry out each of these lessons. Greg’s increased interest led to his perception that the content was important to learn, and more relevant to him as well. In this way, Greg’s perception of relevance reflects the student interest category.

Outside Significance Leading to Authentic Relevance

I reflected upon our classroom time together, and was able to remember a specific incident when Greg was soaking up social studies content and concepts that were ungraded. After the September 11 attacks in New York, students in Greg’s class were trying to make sense of the sudden tragedy. During the numerous times we collectively discussed the situation, Greg was intent upon understanding the state of affairs. During one of our interviews when Greg was stubbornly insisting upon his grade oriented performance orientation (Dweck, 1989), I introduced the September 11 discussions into the mix.

John: You and Charlie (pseudonym) in class, especially when it came time for, after we had the terrorists attacks. You remember that?

Greg: Yes.

John: Okay. You and Charlie were just full of questions. Did we have a test on that?

Greg: No, but it was just a really, really interesting subject. If it's a really, really interesting subject, I just focus really hard.

John: Is it just interesting, or is there something else to it?

Greg: Just interesting.

John: What about that subject made it more – something you were more curious about?

Greg: It was going on in our nation as we were talking about it and it wasn't past. It was present.

John: Uh huh. Is there ever anything else in school you're curious about?

Greg: When we're learning about certain subjects, I'll usually ask a lot of questions.

John: Are those questions – what are they for? What do you want to know?

Greg: About how to learn it and knowing what's on the test that's coming up.

John: But when you're curious, does curiosity always have to come back to tests?

Greg: No.

John: Or worksheets or grades?

Greg: No. Maybe just learning it.

The events occurring in the world were very relevant to many Americans during the weeks that followed the attacks. The emotional shock Greg received from the attacks and his subsequent attempts to learn more about related content is consistent with Burns (1996) position that there is a sense of motivational strength in tapping into people's emotions. While Greg struggled to make sense of what had happened, he sought understanding. He did this because the fear and uncertainty that resulted from the events touched his life in ways that he perceived events from the past did not.

Interestingly enough, when the focus of my questioning moved only marginally away from this specific topic, Greg's perception went full circle—right back to his extrinsic reasons for learning. It may sound like Greg was sending mixed messages in his statements, but his motivation actually does include some learning orientation (Dweck, 1989). He is so focused upon his grades that his learning orientation is disguised and possibly even concealed from himself by numerous layers of his blatant perception of extrinsic performance orientation.

It stands to reason then, that even though Greg might be motivated to work in school by his perception that grades are important (thus generating relevancy to the content that the grades represent), his motivation can sometimes go beyond the one-dimensional extrinsic rewards. He perceives that, given the absence of these rewards, he would not put forth effort. I disagree. In reality, extrinsic rewards and punishment are not the only features that may encourage Greg to engage in learning activities.

Student Interest vs. Disinterest

Fun

During much of the discussions I had with Greg, he answered questions and talked with a matter-of-fact attitude. Since so little emotion was shared during our interviews, it is important to note that Greg became animated while talking about a language arts class he had during one of his years in middle school. He leaned forward, sitting on the edge of his seat, and his voice took on a more energized inflection. I could tell immediately that he was excited about learning in this class.

John: Which was your favorite class last year...?

Greg: I'd say language arts, because Ms. Hall was like an awesome, awesome teacher.

And she was just really fun. She thought of a lot of activities to do.

John: Tell me more about that language arts class.

Greg: Ms. Hall, she just really made it fun. She had a lot of activities. She, every day like we had this one project in class where we'd draw like a peanut and that would be like a criminal because we were reading a book at that time that had to go along with that. There was like a criminal in it. And we'd draw him in a wanted sign. That was really fun.

John: A peanut?

Greg: Yeah.

John: Okay. Tell me more about the activity. Describe it please.

Greg: The activity that I – okay. What we did, she would give us a wanted sign and we'd have to draw a peanut with like a mean face. Like we could draw any kind and we could make it look like any person. And—

John: Any person from the book?

Greg: Yeah.

John: Okay.

Greg: Or like any person. I mean, it didn't have to be from the book because this was your own imagination on this. And this just went along with the book. And we would just draw, finish drawing that. And we'd have to write a description about it and what it did and everything.

His comments that she was an “awesome, awesome teacher” who “thought of a whole lot of activities” show that Greg perceives Mrs. Hall's class as one that incorporates a variety

of attention gaining and maintaining strategies. Consistent with Small, Dodge, and Jiang (1996), this was effective for generating interest and preventing boredom.

Disinterest and Engagement

As a student who is highly performance oriented, I wondered if it mattered at all whether or not Greg liked or disliked the class and/or the assignments. If so, did Greg's learning change when his orientation changed? First, Greg is talking about the lack of lesson variety in his math class.

Greg: Okay. We probably get one, like, we'd get one page out of the book and we'd get to review that. And basically that would take up the whole class. Maybe we could get a quiz in or a worksheet, but not often. We basically go over one part of the chapter.

John: During an assignment such as that, that you do day after day, what are you thinking about during those assignments?

Greg: Boring, boring, boring. But still got to work hard and try and do your best. So I mostly stay motivated still.

John: How does that compare to the assignments that you are enjoying?

Greg: The assignments between that and the ones that I'm enjoying is basically I just get more enjoyment out of them and I think I get more learning because they're making it a fun way to learn.

John: You get more out of it?

Greg: Yes.

John: What do you mean by that?

Greg: I pay attention more and I just basically pay attention more. And I memorize the stuff better.

Again, Greg talks about school with the pragmatic attitude that is indicative of his performance oriented goals. He does not allow himself to dwell on the aspects of school that he dislikes. He was willing to tell me that he thinks this particular class is “Boring, boring, boring,” but he always makes sure to remind me that he is still willing to, “work hard and try and do your best.”

On the other side of the coin, Greg’s comments that he “gets more out of” an assignment that he enjoys by paying attention is telling. When he is interested, the learning comes more naturally, and he is able to “memorize the stuff better.” This is consistent with Day’s (1982) position that a student will learn better when heightened awareness and level of attention cause his attention to become aroused.

Interesting Experiences

Later, I asked Greg to talk about his favorite experiences in school. I wanted to know which experiences he had that brought out the best in him and motivated him to learn the most. Without missing a beat, he immediately brought up field trips.

Greg: I mean, can I include field trips in this, too?

John: Sure.

Greg: Alright. Another one would be last year a field trip to the zoo. And that was really fun because I like animals and everything. And then probably my favorite field trip would be in sixth grade and we went to the Museum in North Carolina. And we rode like a Greyhound bus. And that was really fun because it was an all-day trip. And we got to go to – we got to like pretend we were in a space shuttle and

be actually the person in the space shuttle directing it. They gave a certain job to each of us...The outer space [trip]...was in sixth grade. The zoo was in seventh grade.

John: What class, what subject do you think that the zoo and outer space deal with?

Greg: The zoo would deal with actually science because we studied animals at the time we went to the zoo. And the, what was I going to say? The other one, the space one would have to go with science, too, because we'd go over Astronomy.

John: How do you – you've mentioned before that science was your least favorite class because the subject matter does not interest you.

Greg: Yeah.

John: However—

Greg: Yes. Uh huh.

John: Do you see a conflict between what you said and what you're saying now?

Greg: Not really. It's just the field trips are fun. It's just, usually class time isn't that fun unless we usually watch the video. The work, I hate the work in science because either we just do worksheets or we do chapter reviews usually as our work, or take tests.

Greg's comments that, "we got to like pretend we were in a space shuttle and be actually the person in the space shuttle directing it. They gave a certain job to each of us" is consistent with Hootstein's (1994) findings. He claims that teachers can make learning more motivating by incorporating peer tutoring, cooperative learning, role playing, simulations, discussions, projects, and tasks with game-like features. The space field trip

incorporated aspects of cooperative learning, role playing, and simulations. Working together (cooperatively), the students each played roles in a simulation.

This piece of data was significant because it shows an inconsistency between Greg's earlier comments about his perception of science and the current comments concerning the science field trips. These were not the only field trips he took during his middle school years, but they were his favorite ones. His favorite experiences were not just any field trips, but were centered on his least favorite subject: science. When I pointed this out to Greg, he made it clear that it was not the content of his science classes that he hated, it was the teaching methods that made the class boring. Keller (1983) claims that a student's perception of content's relevance can come from the teaching methods. I would argue that the teaching methods can also be the source of a student's interest (and/or disinterest) as well.

Greg's admitted dislike for science coupled with his admission that some of his favorite experiences in school have dealt with science content is telling. At the end of his statements, he says that it is "the work" that he dislikes. Greg is not a lazy student who dislikes work in general. It is the type of work he associates with science that influences his perception of the subject. Therefore, it is not the content that interests or disinterests Greg in school, but the teaching methods.

Worksheets

During my earlier conversations with Greg, he indicated that he was always willing to "work his hardest." My observations of Greg verify that he will put forth strong efforts most of the time. Whereas Greg's ability to concentrate on assignments he dislikes is strong, it is not unlimited.

John: And I'd like you to tell me a little bit about some assignments that bring out the worst in you.

Greg: Probably worksheets. I mean, like I like, yeah, worksheets usually. Not tests.

Tests are usually easy if you study hard in class and you take all your notes. But probably worksheets because sometimes you don't even – we haven't even gone over the stuff and they just give you worksheets and they take them for a grade.

Greg's distaste for worksheets is consistent with Hootstein (1993), who claims that adolescent students need to pursue interests in active ways or they will be bored. Greg's last comment refers to his learning orientation, which is highly dependent upon outcomes. Greg's dislike for worksheets displays the locus-of-control/self efficacy category as well. Consistent with the attribution theory (Weiner, 1986, Graham & Weiner, 1996), Greg prefers assignments that he perceives will give him the best opportunity to succeed. Greg perceives that teachers who take worksheets for grades without going over the material first are not giving him a fair chance to succeed, removing the locus-of-control from his grasp. His disinterest in the passive nature of worksheets and his perception of an external locus-of-control work together to erode his strong motivation to engage.

The context of how the material is taught plays a big role in how Greg perceives a lesson. Keller (1983) argued that the relevance of material comes from the way material is taught, and does not necessarily need to come from the content itself. I would go a step further and say that, Greg's interest in learning may not necessarily come from the material either. The way in which it is taught has an influence on his motivation. Content

that is taught using worksheets and chapter reviews is unlikely to interest and motivate Greg to engage in inner dialogue with the content.

Active Learning

After Greg's positive comments about the field trips to the zoo and outer space, I was interested in following up on his earlier comments about science. Greg's eighth grade science teacher made consistently strong efforts to engage students in hands-on labs and other activities. The following activity that Greg discusses allowed students to create a mock volcano eruption.

John: Is it [science] the same this year [as it was in the past]?

Greg: Yeah. Except Ms. Rocker makes it a lot more fun usually than my teachers in previous years.

John: So what is your feeling about the subject of science this year?

Greg: I mean, I still don't really like it, but it's a lot more fun because my teacher makes it a lot more interesting and she usually does some games along in science and a lot more labs...labs either – like I explained earlier, we just finished a volcano lab. That would help us with like learning the parts of a volcano, measuring like how scientists measure the caldera of a volcano, and that's the crater that it makes....And what we did, we blew up a balloon, same diameter. We'd cover it up in sand and then pop it and then see what the caldera would be.

Greg's comment that "Ms. Rocker makes it a lot more fun usually than my teachers in previous years" and "my teacher makes it a lot more interesting and she usually does some games along in science and a lot more labs" indicates that he enjoys the methods that Ms. Rocker uses. His comments that "I still don't really like it" are not inconsistent

with these other comments. In fact, they show that Greg's dislike for the content is not necessarily indicative of a dislike for a class. Later I asked him about his overall feelings or his eighth grade science class and Greg told me it was one of his best classes during that year. So how does interest lead to learning and understanding? Greg's easy usage of the term caldera and his subsequent understanding of what role it plays in a volcano indicated to me that hands-on labs in science motivated him to engage in learning.

Games

Greg's competitive nature influences his impressions of classroom activities. He indicated to me that some lessons he found engaging were based upon games. He shared several of these ideas with me.

Greg: One of my favorite ones would be probably 7th grade in social studies and we did a, we did like, we played like a game in which it was called "Family Feud" and we basically had two teams and then we'd have one person go up there at a time.

John: Well, how did it work?

Greg: You'd have two teams. You'd divide them up individually. And then you'd have a bell like on the center of an overhead and you'd have one person at a time go up and then our teacher, which would be Ms. Barker, would read out the question and then we'd press the bell and then whoever rings it first, gets to answer the question. If you get it right, you get a point. And then, let's see, another one –

John: Tell me a little bit [more] about the games.

Greg: I like – well, the games, like in every class are fun because, I mean, it just gives us something else to do because instead of studying from the book, it actually helps us both remember and have fun when we're playing a game.

John: How do you think it does that?

Greg: Because you're actually enjoying the game and then you're learning the material at the same time.

Greg's comments that, "games...in every class are fun" indicates that it is unnecessary for him to be interested in the substance of the classroom content to be motivated.

Regardless of the class, Greg claims to be engaged in gaming activities.

I was able to observe Greg participate in Jeopardy, Who Wants to be a Millionaire, The Weakest Link, and bingo on numerous occasions in social studies. Whether he was a contestant, the host, a helper or an audience member, Greg was clearly engrossed. In preparation for the possibility of becoming a contestant, I have observed Greg spending quality time making sure he understands the material. He will often approach me to ask me in depth questions about the content under study. As an audience member in Who Wants to be a Millionaire, I observed Greg as he senses the possibility that he might be called upon to help the contestant in case he is asked to help. He is sincere and accurate when he says that, "it [games] actually helps us both remember and have fun when we're playing a game."

The Influence of the Fun Factor

During my conversations with Greg, he indicated to me that he had a more difficult time concentrating on textbooks and worksheets. These traditional types of activities do not require much, if any, interaction between teacher and student or between students.

John: Tell me the difference between assignments in class. Like how effective are worksheets?

Greg: I don't think they're very effective, just for various reasons like they're not a very fun way to learn it and they're just not a very good way because the teacher's not talking to you. They're just giving you worksheets to learn it from the worksheets, not from them. Which they're supposed to be doing. And they're the ones who really get it, not the worksheets.

John: Is there a time when worksheets might be effective?

Greg: Probably not.

John: But you said you still learn in say, math, where there are a lot of worksheets.

Greg: Because usually our teacher will go over it before she gives us the worksheets. I had some problems last where they just gave us the worksheets without even talking about the subject. Our teacher just gave us worksheets.

John: Uh huh. What's the difference between using a worksheet and say, playing a game? You talked a little bit about games last time.

Greg: The difference between that is the fun factor and just, it gets you thinking about the stuff more when you're playing the game. And I think it memorizes a little bit better.

John: How?

Greg: To tell you the truth, I really don't know. It just does.

Though Greg is not able to articulate his feelings about why games are more effective for him, he tells me that the "fun factor gets him thinking" about the material while he is playing the game. This statement provides evidence that games have a positive influence in Greg's engagement to learn. It clearly provides a stimulus that creates interest, which

Small, Dodge, and Jiang (1996) contend is an important influence on motivation. It is also consistent with Dewey's (1916, 1933) position that thinking leads to learning.

Games, Interaction, and Involvement

Greg talked about assignments that he enjoyed and how they drove him to think. I wondered what other enjoyable lessons Greg might share with me he enjoyed. At this time, he gave me a better indication of why enjoying assignments motivate him.

John: Tell me about some assignments that you've had, whether it's projects, assignments, games, anything. I'd like to hear more about the ones that you enjoyed.

Greg: The projects and the games.

John: Anything. Anything that you've done in school that you have enjoyed.

Greg: I mean, just all the projects I've done I've enjoyed. And all the games that we've had I've enjoyed, even if they're not the best games. But it still ended up being fun. One of the games, for example, would be Jeopardy. And that would be a lot of fun because we get really involved. We'd have two separate teams and basically we'd go side to side and get the answers. And if you got it right, you get the amount of points on the board. We'd have like five categories and then a separate category, which could be anything from the past or like from a TV show, for all we'd know.

John: When you're playing a game like Jeopardy, what's going through your mind while the questions are being asked?

Greg: I've got to be the first to answer it.

John: I have to be the first to answer it.

Greg: Uh huh.

John: Are you sharp at that point?

Greg: Yeah. Really sharp.

John: When you're doing a worksheet or you're doing some of that other stuff that you talked about, are you sharp?

Greg: I'm still sharp, but not as sharp because it's not as interactive as we were doing in the games.

John: Interactive in what way?

Greg: Just basically we get to be – we can put more into the game. We can like – our whole group could like – I don't know how to word this. But we'd be more into the game. And I'd be more into the games than the worksheets.

John: You'd be more into the game.

Greg: Than the worksheets.

Greg's comment that he likes to be the first one to answer questions during a game is another example of his competitive nature. Once again, while Greg talks about motivating influences in the classroom, he declines to acknowledge that there might be a time when he is not engaged in learning at school. He does, however, admit to being "sharper" during "interactive" competitive games than he is while completing more traditional assignments such as worksheets. "Being sharper" is Greg's way of saying that he has the satisfactory level of attention discussed by Keller (1983).

Greg tries to explain to me that interactions with the game, the group, and the content exist on more than one level. Not only is he interacting with those around him and learning through social constructivism (Vygotsky 1978, 1986), but within his own

mind, he is interacting with the different levels of the content and trying to make internal sense of it (Piaget, 1967; Dewey, 1916, 1933). The excitement caused by the game simply increases the complexity of the interaction.

Greg and his teammates are playing an active role in constructing their own knowledge, while the teacher is not seeking to simply transmit information. Rather, the teacher has created the situation and is acting as facilitator to the team's collective construction and to each individual's cognitive development. I suspect that, when Greg told me, "I don't know how to word this" he was struggling with how to explain the concept of constructivism as described by Muth and Alverman (1999). During the games, the teacher offers different levels of question, ranging from Bloom, Englehart, Hill, Furst, and Krathwohl's (1956) lower level knowledge based questions to the higher level evaluation questions. The higher level questions cause students to interact with their memories, their experiences, and before they collectively answer the question, they must interact with each other.

Conclusion

Greg is clearly a student with an orientation to achievement that is skewed far in the direction of performance orientation. His outlook on school is not necessarily unpleasant, but Greg certainly perceives his role as a student comparable to an adult who might view his occupation as important but often dull. Greg is highly motivated to perform by extrinsic rewards—in particular, grades. Greg's perception of grades is linked to his definition of learning. He places an enormous amount of faith in his teachers' judgments. This goes along with Greg's predisposition for conformity and the ample credence he places in authority.

When his teachers assign a grade to Greg's work, he perceives it as evidence of how much he has learned. He perceives an "A" or a "B" as confirmation of strong learning, while viewing a "C," a "D," or a "U" as evidence that a student did not learn. In his case, Greg generally attributes his success to a combination of his ability and effort, while attributing his occasional failures to a lack of effort. In the few circumstances that Greg shared with me when his grades were unacceptable (to himself and/or his parents), he claimed to move forward by putting forth more effort. Greg perceives that this extra effort has always resulted in eventual success for him.

Greg uses his competitive nature to motivate him to become what he perceives as "better" than the other students. When a situation Greg identifies as competitive arises, he attempts to win so he can gain recognition and distinguish himself from the rest of the pack. He has a strong need to develop relationships with his teachers. Though he perceives that his need to develop these relationships is a need for friendship, in actuality it is more complicated. Greg has a strong need to be recognized as "the best" by those whom he considers to be consequential to his future, and he perceives that teachers are important people. Greg also sees this friendship as a means of strategy that he can use to stay out of trouble and to be graded better on subjective assignments.

Greg's overt perception in regards to the sources of his motivation is mostly extrinsic in nature. The actual sources of Greg's motivation should by no means be seen as exclusively extrinsic, though. Greg does not easily admit it, but he can be motivated to learn in the absence of extrinsic motivators when he is interested in a topic or when he is interested in the method of presentation. In these cases, Greg can be counted on to make a strong effort to engage in his own learning.

In summary, what reasons did Greg have for choosing to engage in learning sometimes while choosing not to engage at other times? Greg's reasons for choosing to engage in learning were mainly extrinsic. Greg chose to strongly engage in order to get on the good side of his teachers. Greg was always willing to learn the content that teachers set forth in efforts to make straight "A's." Sometimes Greg chose to engage in learning for immediate rewards such as video games. At other times, the promise of advanced high school classes and entrance to a good college were enough. In the absence of these extrinsic goals, Greg was motivated to engage in learning when competition or interesting was present. Greg was so highly motivated that he was willing to engage in learning during every instance I was able to observe. Hypothetically though, Greg would be unwilling to engage in learning in the absence of grades or when an activity was too difficult to even fathom success.

CHAPTER VIII

A CROSS-CASE ANALYSIS

Introduction

The purpose of this chapter is to compare and contrast the perceptions and experiences of Jenny, Missy, Bob, and Greg. Each of the students has some common perceptions and/or experiences with the others, while each has a distinctive understanding of them. Some of the data has shown that, though actual experiences were mutual amongst the students, the individuals' perceptual experiences were unique. In other instances, experiences that appear to be exclusive of each other are linked by the students' comparable perceptions. Consistent with my conceptual framework, this chapter is divided into six sections: Student Orientations to Achievement, Classroom Climate, Perceived Student Needs, Locus of Control-Self Efficacy, Relevance-Content Value, and Student Interest vs. Disinterest.

Student Orientations to Achievement

Dweck's (1989) general concepts of orientation to achievement provide a natural starting point in the cross case analysis of the four individual case studies. The motivational consequences of individual inclinations toward one orientation or another are significant. In addition, the intermingling of an individual's predisposition and situational circumstances are noteworthy. Though each of the four students exhibited qualities from each of the orientations, the strength of individual inclinations influenced their perceptions of each experience they shared with me.

Though I observed circumstances when Greg was oriented toward learning rather than performance, he was by far the most focused participant upon performance orientation. This orientation influenced his perceptions time and again. With this in mind, extrinsic motivators appeared to have the strongest impact upon Greg. On the other side of the coin, Missy was more focused on learning than she was with achieving. As with Greg, she displayed situational characteristics that belied her predisposition, but was more heavily influenced by different factors than Greg. Both Jenny's and Bob's tendencies were almost evenly combined between the two orientations, though Jenny was slightly inclined toward a performance orientation while Bob leaned in the direction of a learning orientation. Missy, Jenny, and Bob tended to engage at a higher level when a lesson awoke their learning orientation, whereas Greg appeared susceptible to engagement when either orientation was stimulated.

Classroom Climate

The classroom climate was an important influence in three out of the four students' motivation to engage in learning. Consistent with his strong performance orientation, Greg was only minimally influenced by the classroom climate. In addition, Greg's outlook on education was one of pragmatic resignation. When Greg perceived there to be an important grade at stake, he was likely to put forth a strong effort to learn the content—regardless of his surroundings.

Since Missy, Bob, and Jenny were more heavily oriented toward learning than Greg, other factors played larger roles in their decisions on how engaged they might become. They reported that the situational classroom climates had a significant impact on their willingness to engage in learning. Though Jenny was plainly more influenced by

perceived negative aspects than the others, all three reported both positive and negative characteristics of classroom climates that influenced their motivation.

In the Mood

Missy, Bob, and Jenny each described how situational classroom climate influenced their desire to engage in learning. Missy spoke of a “Getting into the Swing” game and “Being in the mood” in two of her classes. I asked her how the “Getting in the Swing” game influenced her attitude.

Missy: That year I did good in math. I mean, it helped doing that instead of just going in there, sitting down, giving us book work and all that. It really got us excited about math.

Though his actual experiences varied, Bob’s situational perceptual experiences were similar to Missy’s. He contrasted how two dissimilar classes might result in two different attitudes.

Bob: If the teacher is dull all of the kids are dull and it causes the atmosphere to be dull. Yet a class with an exiting (*sic*) teacher causes the kids to be kind of rowdy but the room seems more colorful.

Jenny made several allusions to classes where her mood to learn was turned off before the actual lesson began. Consistent with their statements, both Bob and Missy appeared to be happier and more susceptible to learning in the classes where they experienced energy and excitement.

Missy even talked about a class in which candy was used to gain students’ attention at the beginning of each period. In her case, this extrinsic motivator created a sense of belonging and an unspoken bond between Missy and the teacher. Missy’s

reaction to the candy and the game was similar to the perceptual experiences of both Bob and Jenny. Each of these students associated positive feelings toward teachers with positive feelings toward a class and/or a subject. These positive feelings often transferred into a willingness to engage in learning. In cases where these positive feelings were missing, they were often replaced by negative feelings and an unwillingness to follow through on learning concepts in the class.

Humor

For Missy, Bob, and Jenny, a teacher's sense of humor often influenced their view of the classroom's climate. All three of them discussed how humor helped them relate to a teacher, a class, and a subject while relaxing them and setting a positive tone for individual lessons.

Bob: And things that can be kind of funny. If you make it to where it's fun, it'll make students including myself work harder.

Jenny: Well, you talk to us like...you aren't like a higher level above us. You aren't superior, as superior than some people. And you joke around with us and stuff like that... it makes me like the class and it makes me just feel more relaxed and I don't feel like I'm going to get in trouble so I feel that I can just be, I don't know, relaxed.

Missy: And then social studies, fun class. Funny. Very funny. He [Missy is talking about me] always makes it interesting. And he always finds something, a fun way to do something.

Bob's comments are specific and thought out. Jenny's comments are insightful, yet general, while Missy's are a bit overstated. Due to a variety of reasons, classes tend not to

be entertaining on a daily basis. It would be maddening for a teacher to even attempt it. Missy comments are a bit overstated, but they were consistent with Bob and Jenny's comments. Missy perceived that I always found a fun way to do something in my class. I do regularly attempt to employ methods with the hope that my students will enjoy them, but usually only two to three times a week. Missy's comments show that the efforts have borne fruit. It seems that her perception of my attempts at humor have a transfer effect. Jenny, Bob, and Missy tend to associate their feelings for a teacher with their feelings for a class. Though Missy's statements exceed Bob and Jenny's, the perception and meaning behind them are the same. If teachers are relaxed and friendly, these three were more willing to work.

Negative Climate: Honored Voice Denied

Jenny, Bob, and Missy had much to say about the negative aspects of certain classrooms. Their unenthusiastic comments on situational classroom climate were far less subtle. For each student there were slight differences in what they perceived to be negative classroom climate, and also differences in how they handled their situations. On the other hand, each of these perceptions often ended with an identical outcome: a turned off student who was unwilling to engage in learning.

For Jenny, in classes where the teacher discouraged interaction (teacher/student or student/student), she became fearful and stressed. Even though she is a quiet and well-behaved student, she often felt like she was going to get in trouble. Jenny engages in a stressful hidden internal dialogue that draws her attention away from the task at hand, resulting in a state she described as "zoning on autopilot." In this state, Jenny will often

complete her work from the standpoint of performance orientation. This usually results in minimal effort and little, if any, engagement in learning.

Jenny: Well, when I'm relaxed, I guess I feel like I can learn better and I remember more. But when I'm stressed out... I guess I get bored and I just kind of sit there like this. [she stared straight ahead for approximately three seconds, tilting her head slightly, eyes glazing over] But I'm thinking about other things and kind of zoning out. But it looks like I'm paying attention until they call on me... And then I'm like, "Um." And I start to laugh because I have no clue. And then the teachers get mad...

Jenny will laugh often when she is nervous, even when it is the inappropriate response. She does not intend to be disrespectful, she uses laughter to diminish the stress she is experiencing. Missy's initial reaction to a class where she perceives a lack of respect by the teacher is different from Jenny's.

Missy: Well, she'd like, she'd say that she'd [already] answered them and we should have been listening, but we were all listening and quiet and when people still had questions that she didn't answer, she wouldn't answer them. And she'd say that she said them already, she already mentioned the answer.

John: What do—how do you feel the students' relationship with that teacher was?

Missy: We couldn't stand her. That's practically it.

When Missy described a class where she felt that the teacher discouraged the students from asking questions, she was describing a perceived lack of respect. Unlike Jenny, Missy is more willing to engage in academic banter with a teacher. She walks into class and fully expects her opinions to be valued. She expects her voice to be honored. In

classes where she perceives this to be absent, she becomes insulted, and her entire outlook is altered. Consistent with her demonstrative disposition, her posture changes, she folds her arms, sticks her lower lip out, becomes quietly belligerent, and turns off her mind. Though Missy cannot necessarily speak for the other students, her comments speak volumes of the relationship between herself and her teacher and its influence upon her perception of the classroom climate. Bob talked about a similar perception that he had of a teacher whom he felt treated him in much the same way.

Bob: The way a teacher acts really affects the students' willingness to work. Say like last year I had a math teacher that really wasn't someone I liked. So that resulted in me not really wanting to listen to her and that caused me not to make the best grades in the world. I had A's in all of my other classes yet in that one I had a C. This year I don't dislike my math teacher and that has resulted in a good grade.

Respect is a great factor in getting students to listen to a teacher. In the mind of a student they think that if the teacher shows no respect to them why should they show respect to the teacher? So if the student feels respected the student will respect his/her teacher and listen to them and then you have a good student.

Bob's initial reaction to teachers he perceived to be disrespectful was more active than Jenny's and Missy's. In addition to learning and grade problems, I was able to link behavioral troubles with classes where Bob felt disrespected. Bob's comments that, "if the teacher shows no respect to them [the students] then why should they respect the teacher?" is more consistent with Missy's comments than Jenny's comments, but the end

result is the same. For Jenny, Missy, and Bob, classroom climate that was based upon mutual respect was a prerequisite for their choice to engage in learning.

Though Greg might be willing to engage in his own learning at school for the sake of grades and other extrinsic factors, the other three indicated that these factors were not enough. They were likely complete tasks for extrinsic reasons such as grades, but engaging in learning at school required additional influences. The completion of tasks for grades only, with little or no effort to attribute context to the tasks, usually resulted in effort that was far below their best. In addition, the completion of these kinds of tasks often resulted in little to no learning. A classroom climate that nurtured Missy, Bob, and Jenny's individual needs provided them with conditions that prepared them for learning.

Perceived Student Needs

Each of the participants had needs that were alternately met and ignored situationally. Certain needs that were met or unmet that resulted in students' long-term perceptions of a specific classroom's climate were included in the previous section. The needs that are listed in this section are basic, and in most circumstances, do influence students' perceptions of their self efficacy, content relevance, and their interest in specific lessons. With student needs, the complicated interplay between the various factors of student motivation were clearly at work. Though the basic needs will be addressed in this section, more specific examples of the interplay between categories will also be included in the later sections.

Put another way, each student's perceptions of his or her particular needs and how these needs influenced other factors will be addressed in the student needs section. In later sections, the student perceptions of how curriculum and teaching methods

influenced their needs will be addressed. Each student had needs that were common with the others, and there were a few that were unique. In this section, I will cross-analyze my students' needs for student/teacher relationships, student-student interaction, active learning, and student choice.

Student-Teacher Relationships

Though the specific reasons for this need varied, all four students expressed a strong need for a positive relationship with their teachers. This need has close ties to the classroom climate category. In fact, for Jenny, Missy, and Bob, their perceptions of their student-teacher relationships was so closely tied with their perceptions of the long-term classroom climate, I chose to include them in the classroom climate category.

The most unique implications from student-teacher relationships came from Greg. Though his need for positive student-teacher interaction was just as strong as the others, his was virtually uninfluenced by the classroom climate. Early in the data collection process, Greg shared his need to be “friends” with the teacher. I asked him what he meant by being friends with the teacher.

Greg: Just, I mean, getting on their good side and basically like having a good personality, being social.

John: Do you think it's harder to do that with some than with others?

Greg: I guess you could say that, but like sometimes you can have some strict teachers and that's harder to like get on their good side. And usually on the middle all the way...I mean like you're not like her favorite student, you're like in the middle, like along with all the other kids.

Greg's need for positive interaction with important adults in his life was a motivating influence on his willingness to engage in learning. Greg needed to feel head-and-shoulders above the rest of the students in his class. He was not satisfied with his own perception that he was "better" than the others. His respect for authority led him to respect a teacher's position and a teacher's judgment. Greg's performance orientation is based in part on his concrete view of grades. For him, grades equal learning. The higher a teacher rated Greg's performance, the better he feels about himself. Greg's competitive nature in combination with his respect for authority and his performance orientation leads him to seek a special status in a teacher's heart. Greg may seek positive adult interaction with many of this in mind, but there are other, more concrete reasons as well.

Greg: Basically, so you can – I mean like, you won't get as much in trouble in class if you like talked. If you're like a troublemaker, if you talked once, you'd probably get a detention or something...

Regardless of Greg's intention, the student-teacher relationship was an important motivator to him. Greg worked hard and tries to learn more than the others in order to get on a teacher's good side. Once he perceived he was there, he poured it on in order to maintain his perceived position at the top of the hierarchy. Unlike the others, in a class where the teacher was "strict," Greg claims that he would work extra hard to "get on her good side." I have included Greg's student-teacher relationship in the student needs section instead of the classroom climate section due to his unique perception.

Student-Student Interaction and Social Constructivism

All four participants spoke of the need for positive interactions with peers through group work, and all four of them described being influenced by aspects of social

constructivist learning. While Jenny described how working in groups influenced her willingness to learn, she brought the Zone of Proximal Development into the mix.

Jenny: You get to socialize more and if you don't get something, your friends can help you understand it.

Not only was the Zone of Proximal Development helpful to her learning, Jenny also claimed to enjoy the opportunities to discuss deeper meaning of the content with her peers. Jenny's social needs improved her internal locus of control and increased her perception of the content value. Missy had similar experiences with group work.

Missy: Group work to me, it seems that you get to get to know your peers a little better, plus it's – if you're working on like a big, big project, then it may help get the work done when it's done. But if – I like working in groups because to me it just seems more fun because you get to work with your friends. It has nothing to do with like taking the easy way out and stuff.

Missy perceived the overall school climate as competitive. When she was just about through talking about her positive perception of group work, she paused for a moment before proceeding. Her final comment that, "It has nothing to do with like taking the easy way" was born from a sense that she needed to qualify her statement. Her original comments discussed the positive aspects of socializing and cooperating in a group. Perceiving that teachers who read her comments might not understand her meaning, she wanted to clear up the possibility that her comments might make her appear lazy. Bob's perception of group work was based upon the same set of needs.

Bob: ...working with the groups is fun because when you work with your friends it makes you want to work harder because you do the work with your friends.

Jenny, Missy, and Bob perceived working in groups as a social opportunity. In addition, each of them recognized that there was a chance to learn while having fun. All of them were motivated to engage in learning under certain group conditions. Once again, though, Greg stands out from the rest. The only occasion Greg discussed working in groups was during a conversation we had about participating in games in the classroom.

Greg: Just basically we get to be – we can put more into the game. We can like – our whole group could like – I don't know how to word this. But we'd be more into the game. And I'd be more into the games than the worksheets.

Greg's motivational experience with groups occurred during a low stakes game that involved cooperation within a group and competition between groups. In other follow-up comments, Greg spoke of the interaction that existed between his own thoughts and those of the other students within the group. He is a natural leader with a strong desire to stand out as the best among the crowd. I observed Greg volunteer to be the team captain in every instance. For various reasons, each of the four participants claimed to be motivated to engage in thinking and learning when faced with proper opportunities for group work. On the contrary, I will illustrate two examples of group work that students claim were ineffective.

Cooperating vs. Abandoning the Lesson

Jenny and Bob each described an experience with group work that they perceived was non-motivating. For Jenny, her experience led her to allow another student to complete all of the work while she socialized.

Jenny: They end up doing all the work. Because we were doing a lab the other day and we had a kid that was a genius and so me and my friend, we just talked while he

did most of the work. And we're like, "Wait a minute. I don't understand it." He kind of acted like we were stupid because we didn't understand it.

John: Did he explain the stuff to you?

Jenny: Not really. He just kind of gave us the answers to the questions. So he didn't explain why or anything...

Jenny was forthright in her description of her role in this situation. The only accountability was the paper with the answers that individuals were supposed to turn in to the teacher. There was no real individual accountability for her learning the material, and Jenny remained passive. There was no group accountability to prevent the "genius" from completing all of the work and sharing answers. It appears that the only one who possibly learned anything was the genius. Bob's experience was similar, but in his experience, he was one of the students in the group who was working while he perceived others to sit idly watching.

Bob: The group I worked with had a couple of people that just kind of sat around and watched us...I don't like when a couple of the people just sit there and watch. I like to spread the work out. But usually every time in a group there's somebody that doesn't want to do it, so they won't do it and they won't help.

Bob's perception of his group situation was different from my own. I observed his group interaction closely, and came away with the impression that all students were involved in social constructivist learning. Since Bob was responsible for writing down the group summary and one other student was responsible for orally reading the material to the rest of the group, he perceived that they were working while the others were not. I observed each student verbally contributing to the overall summary. In addition, though each

student was responsible for presenting only one part of the lesson, each was responsible for understanding all of it. Bob's perception that two group members were inactive is troubling. Even more disturbing was Jenny's experience in conjunction with Bob's perception of this as a phenomenon when group work is assigned. This phenomenon will be discussed in more detail later during the student interest vs. disinterest section.

Active Learning

Each of the four students was motivated to engage in activities that employed their bodies as well as their minds. When describing this type of lesson, every one of them had a number of stories they wished to share. In addition, they often spoke excitedly during their descriptions. Bob and Missy appeared to have the strongest need to be active in their learning. Jenny prefers active methods as well. Though I will cover different aspects of active lessons during later sections (along with their aversion to passive learning), I have included active learning in the student needs section as an introduction.

Of the four, Greg appeared to have the most trivial need for active learning. As consistent as this might be with Greg's strong performance orientation, he is an adolescent boy with adolescent needs. Greg's strong work ethic in conjunction with his perception of a relatively joyless (but worthwhile) school experience made it difficult for him to admit that active lessons were preferable to book work and worksheets. Remembering that science was historically his least favorite subject, the usually composed Greg shared a rare moment of excitement in his description of a science lesson.

Greg: Ms. Rocker makes it [science] a lot more fun usually than my teachers in previous years... We just got done taking a lab on volcanoes. And what we did, we blew up

a balloon, same diameter. We'd cover it up in sand and then pop it and then see what the caldera would be.

Interestingly enough, Missy talked about the same lab.

Missy: This year in science we're doing this thing right now where we're going to do a video production about volcanoes. And she always has something funny to talk about. It's an interesting class. Every day it gets funnier and more interesting.

John: Tell me more about that class and tell me more about the – tell me more about some of the things you're doing with volcanoes.

Missy: Volcanoes. We just previously got done with a lab. And what we did was you had to pop a balloon buried in sand to where it was kind of like a volcano. She had a pencil and at the end it had a tack taped to it. And what you did was you packed sand on top of the balloon to a certain height. And then you'd take the pencil and you'd poke it from the top. And then you dig away the sand at the top and then you'd go down and you'd look at the caldera or the place where the balloon was, the empty hole. And then you'd measure the diameter and the width and the depth. And then we've also done – we went to the lab. We looked at current eruptions that have erupted and that's about it.

This lesson made quite an impact upon both Greg and Missy. Not only did each of them describe the lesson as an example of a fun and exciting lab, but both of them specifically described the “caldera” by name. Missy was especially enthusiastic when she described hands-on activities. Unlike Greg, Missy regularly celebrated her experiences in science classes throughout middle school.

Missy: Science. Science was fun. We did these little dioramas. We'd do a lab. She'd bring in stuff that she got from home and we'd like – like the next day we'd like dissect it or something. Like I remember once we did these mushroom prints. And that's where you took off and you cut the stem off the mushroom. You place it on a white sheet of paper. And then you'd let it sit there for like a week or five days. And then you came and you picked up the mushroom and the pores from inside the mushroom were all on the paper. And then what you had to do is you had to spray it with hairsprays. That way the pores wouldn't come off.

John: Uh huh.

Missy: And it was an interesting lab. I've never seen anything done like that with a mushroom.

Unlike Greg, both Bob and Missy are strong kinesthetic learners (Lazear, 1991). Not only do they enjoy learning by doing, it appears to have a stronger impact on their long-term interest in a subject. In Bob's description of another science lab, he describes the difference between book work and assignments that involve him.

Bob: It [hands-on labs] just makes it more fun and you want to – and when you're doing a lab and you have to write this stuff down, you learn it better than just sitting there writing it rather than actually doing it hands-on.

Though many of the comments Bob made about science during our interviews were positive, he shared Greg's dislike of the content. Bob's comments are his way of explaining that learning about "life science" out of a textbook does not lead to his learning. Writing facts on paper did not lead to engagement for him. Unlike Greg, Bob needs to be active in science to be willingly engaged in learning.

Bob: We've done a lot of labs in there, like classifying rocks. But that's not usually very much fun. But—

John: No?

Bob: Well, it's igneous rocks and we just look at the crystals in them and put them into different groups, which isn't that exciting. But it's better than using all the textbook work... You learn more about them by their texture and you can figure out if they cooled inside or outside the earth. And just being able to feel them tells you a lot more than reading the words.

Bob clarified his comments to me later by saying that classifying rocks was a "ridiculous waste of time." He qualified this statement by telling me that he couldn't believe that Mrs. Rocker made it "fun enough to learn." In these comments, Bob showed that meeting his needs for active learning stimulated his interest and overrode his perception of the content's irrelevance.

In January, Broken Arrow Middle School hosts a mid-year open house night for parents. During this mid-year meeting, teachers are encouraged to have students display the content to parents in interesting ways. Bob volunteered to join five other students and present a science lesson to the parents. Rock in hand, Bob stood in front of approximately 60 parents with a huge smile on his face and excitedly described the characteristics of igneous rocks. Bob enjoyed eighth grade science because of Mrs. Rocker's teaching style, which tended to focus upon meeting the needs of her students.

Student Choice

Bob, Missy, and Jenny all appeared to flourish when their need for autonomy was satisfied. When it was absent, they associated the teacher's unwillingness to share power

with a negative classroom environment and their motivation appeared to lessen. For them, their need for autonomy was an ingredient that influenced their perception of the classroom climate.

Unlike the others, Greg was uncomfortable with the concept of student autonomy. Greg's uneasiness can be associated with both his strong performance orientation and his respect for authority. Both of these influences were upended when he perceived that the teacher had given up control to the students. Greg needed to know what was expected by the teacher so he could exceed those expectations. When students were controlling the direction of the lessons and he perceived that his peers were influencing his grades, he became anxious. Missy enjoyed opportunities to engage in activities that she had a hand in directing, but like Greg, was uncomfortable with too much autonomy. On the other hand, Bob saw autonomy as an opportunity to explore his interests while Jenny indicated that she enjoyed the autonomy incorporated in group work.

Locus of Control-Self Efficacy

The participants in my study each expressed their situational and stable perceptions of their abilities. These perceptions were powerful indicators of each student's willingness to engage in a learning activity. Greg had strong self-efficacy—in fact, an overwhelming confidence in his own abilities. He perceived every actual school related situation to be within his locus of control. Despite her label as gifted, Jenny had the weakest confidence in her abilities. Bob and Missy's confidence levels were fairly strong, but theirs' fluctuated more than Greg's. For Jenny, Bob, and Missy, situational influences had a strong impact upon their willingness to engage in learning.

An internal locus of control appeared to have negligible positive influence on motivating students to engage in learning. On the other hand, student perception of an external locus of control was almost certain to lower the chances that my participants would choose to engage. Their perception of external loci of control—situational or permanent—led to a fundamental motivational shut down in virtually every case that was presented to me. During this section, I will cross-analyze my participants' perceptions of situational classroom influences on their loci of control.

Too Easy, Too Difficult, and Just Right

Jenny often perceived that she was unable to understand content in school. She alluded to a perceived lack of ability on a number of occasions. Her strong abilities and her lack of confidence in those abilities made an interesting combination.

Jenny: Sometimes I don't work as hard at it because usually if I don't understand it the first time, I figure I probably won't understand it. So I work hard to a point until I just get so confused that I can't really do anything.

When Jenny did not understand something, she had the tendency to give up. She does not have a forceful personality, so she did not ask many questions. When given the opportunity, Jenny might ask a peer for quiet and private help, but usually not until later. When she did this, she sought only enough help to complete the assignment.

"Getting lost" in class often, Jenny pretended to work when she could get away with it. During one of my observations, I watched her do this in her gifted science class. While her teacher was using the overhead projector to show the class how to determine where the epicenter of an earthquake was located using complicated calculations and a drawing compass, Jenny was hiding her yawns behind her worksheet. After the teacher

was through explaining how to make the calculations, she worked out a problem with the class. Going through the process one step at a time, the teacher asked the class questions and elicited choral answers from them. Jenny was careful not to make eye contact with the teacher while not calling out answers to the questions either. I asked Jenny later what she was doing during the teacher's explanation. She told me that she was "...completely lost." She had been feigning competence and pretending to pay attention.

Jenny's lack of confidence placed the learning aspect of some school lessons outside of her perceived locus of control. She used some coping mechanisms to deal with her confidence issues after-the-fact, but disabled her learning in the meantime. In Jenny's case, lessons that were too difficult may have turned her off completely, but lessons that were too easy did not lead to her engagement either.

John: ...what do you do with an easy lesson?

Jenny: Just write down whatever answer comes in my head first...you usually don't really have to think as much for easy things. But easy lessons are also kind of boring because you don't really do anything. You already know it and stuff.

Missy, Bob, and Greg had fewer confidence issues than Jenny. These issues did not appear to have a strong influence on their motivation to engage in learning when they were faced with difficult content. In their minds, their locus of control issues were not only outside their realm of control, they were completely unrelated to their own minds and abilities.

It's Not My Fault: Part I

In various situations, Missy, Bob, and Greg were willing to blame the teacher for their perceived failures. Verification of these comments was impossible—but also

completely unnecessary and not related to the purposes of this study. Their perceptions of their failures were the reasons for their subsequent comments and actions.

Missy: One time I did get a “U” but that’s because my teacher lost some of my work when I turned it in so I was – that was – I told my parents that and they understood.

Missy simply blamed her teacher for her failure. She had described this class earlier as “boring class, but it was okay.” Missy was not highly motivated in this class to begin with, but she felt that her efforts were strong enough to merit a passing grade. Relatively speaking, this class was more motivating to her than her (perceived awful) social studies class. She indicated to me that her efforts had not been her best before this incident, and that she became discouraged from working harder in the future. In other words, she saw it as situational. It lessened her motivation in this particular class, but not in the long-term. She still felt that her strong abilities in language arts were fairly stable.

It’s Not My Fault: Part II

Bob indicated to me that one of his earlier middle school math classes had been one of his most difficult and least favorite classes of his entire school career. Bob perceived a personality conflict with his teacher, and his frustration with her led to a lack of engagement. This lack of engagement was at least partially responsible for Bob’s lack of understanding.

Bob: The last couple of years the math is harder. Like seventh grade, I think that’s probably the hardest math, learning the new algebra and stuff. But this year it’s a lot easier because it’s pretty much a review of everything, just a few new things in it.

John: So when you were learning the new algebra concepts, how frustrated did you get?

Bob: I got pretty frustrated. And I had an isolation seat because I'd always want to talk to someone next to me. So I sat by myself. And sitting by myself, my grade went up a few points. Just, I guess I paid more attention where I was sitting.

Bob's problem began with a poor student-teacher relationship. Bob's effort suffered from his perception of this relationship, leading to boredom and eventually behavioral issues.

Once his behavioral issues were cleared up, Bob found himself behind and perceived himself unable to understand the content. Bob perceived that his inability to understand the math concepts was out of his control, leading to more behavioral issues and weaker self efficacy in math. For Bob, the climate of his math classroom led him down the slippery slope from lack of engagement to lack of understanding, to poor grades and to eventual disciplinary issues. Though I could have placed this excerpt in the classroom climate category, Bob's perception of an external locus of control is the hub linking the classroom climate to lack of motivation and disciplinary issues.

Competition and Self Efficacy

Both Bob and Greg appeared to thrive on vicarious competition with others. They appeared to feel better about themselves when they perceived their outcomes on projects, test grades, and final averages to be better than the other students'. Greg used his competitive nature to motivate him to become what he perceived to be "better" than the other students. When a situation Greg identified as competitive arose, he attempted to win so he could gain recognition and distinguish himself from the rest of the pack. Greg was consistently more open than Bob about his desire to be better than the rest. In order for students to know where they stand, most of the teachers at Broken Arrow regularly

post computerized spreadsheets listing student grades (by student number) on the classroom wall. After lunch one day as students were streaming back into the room, I stapled Greg's class roster on the wall with their accompanying grades. When Greg noticed that I was posting the latest grades, he made a beeline to the bulletin board. After he checked his own assignments and average for accuracy, I observed Greg move his finger up and down the list of anonymous student averages. After a few moments, he smiled, held his hands high in the air, and exclaimed that he had the best current grade in the class. When he looked in my direction and noticed I had heard him, he gave me the thumbs up. Bob's sense of competition was more subtle than Greg's, but no less potent.

John: Tell me about the kind of assignment that brings out the best in you.

Bob: Usually things with posters and you put things on it and stuff. That makes me want to do it because I look at it when I'm done and I'm like, "Oh, I did this good." So I like that.

John: Okay. "I did this good" makes you feel how?

Bob: It makes me feel good that I did it and I can do better than other people at it.

Bob was motivated to work harder on his projects because he knew that everyone would see them. Judging other students' projects, Bob commented to me that some students should be embarrassed by their work.

Bob told me that feeling good about high-quality work was not always based upon competition. In math during his eighth grade year, he had been motivated to work harder and learn the content because he felt like he could (internal locus-of-control). It made him "feel better" when he was able to illustrate that he had an understanding of the content.

Relevance-Content Value

Independent of the influence from other categories, content value had little influence on student motivation. While there were a few occasions when the content itself appeared to motivate my participants to engage in learning, they were few and far between. Every one of my participants was essentially a disbeliever in the intrinsic value of the content they were learning in school. Regardless of my approach during the investigation of this phenomenon, the answers were similar. My participants perceived little in the way of authentic intrinsic content relevance for any subject. This section will be divided into the following sections: concrete relevance, extrinsic relevance, concrete relevance (Part II), and personal experience.

Concrete Relevance

During my interviews, I asked each student to describe the importance, significance, and value of any content they were learning in school. Approaching the topic from a variety of positions, my participants were consistent with their answers. On the surface at least, my participants appeared to perceive the subjects of math and language arts as most relevant. Missy, Jenny, and Greg said that science might be relevant. Bob disagreed, making unenthusiastic comments about science content on a number of occasions. Only Jenny generally indicated that social studies had any overt authenticity or significance to her life.

Bob: ...in science we're learning about minerals and rocks and volcanoes which isn't something you really need to know that much about.

The participants perceived that much of the content they are learning in school has little overt value to them. When describing the relevance of content in school, students shied

away from authentic intrinsic relevance, and preferred to concentrate on how it might help them in the future.

Jenny: Probably the language arts the most. And a little bit of math, but I think that most of the math that we learned a long time ago is what I'll probably use more than what we're learning now, because I don't see how equations could help you with what you're going to be using in the future. And maybe a little bit of science, but not as much. So probably mostly language arts.

John: Okay. What aspects of language arts?

Jenny: Probably spelling and stuff because you have to write a lot of papers in high school and college and probably the vocabulary.

John: How about beyond college?

Jenny: Yeah, you'll probably use a lot of vocabulary and stuff after college. It depends on what jobs you have, I guess, depending on what you use. Because you might need a lot of the punctuation and grammar and things like that if you have a writing job, like in the newspaper or something.

Though she mentioned science off-handedly, Jenny's main focus was language arts and basic math skills. Bob agreed with her.

Bob: Mostly probably the math and language arts...

Both Bob and Jenny described math and language arts as relevant to their futures, and both concentrated on elementary skills like vocabulary, spelling, and grammar. Though they answered my questions with regard to this topic, their perceptions held little motivational water. Greg was the only one whose motivation to learn was drastically

influenced by his perception that using content in the future made it important to learn.

The next section focuses upon this aspect of Greg's motivation to learn.

Extrinsic Relevance

Greg's strong performance orientation and his relentless pursuit of the future through present-day success helped to create his perception that school content was relevant. Unlike Bob and Missy, this relevance did contribute to his overall motivation to engage in learning.

Greg: Information? Probably – I know people have said the most important classes are math and science or science and language arts. One of those two. And so basically you have to just like remember all your information that you've remembered from the previous years in all subjects.

John: How about skills?

Greg: Probably test-taking skills, reading skills, mathematics.

Greg's perception of school content as valuable and relevant was almost exclusively extrinsic. His faith in the system along with his clear focus on the future were unlike any of the other three participants. Like the others, Jenny had some vague possibilities that she was considering for long-term career goals, but nothing solid at this point. Her perception of algebra's lack of value contradicted with some of the careers I had heard her mention. I asked her to tell me more about how much thought she had put into her future.

Jenny: ...I thought being an architect would fun, but then I thought about the math that you have to do and I was like, no. I think I'm going to scratch out that idea. So, I

don't know. I probably wouldn't go into that. So I'll probably do something that wouldn't take as much math skills just because I don't think they're very fun...

Though long-term goals were virtually meaningless motivation for the adolescent Jenny, short-term extrinsic factors did contribute to Jenny's unwillingness to put forth the effort needed to understand a lesson. While Jenny was discussing her lack of engagement in a very difficult assignment in her academic enrichment science class, I tried to find out how her teacher might influence her effort.

Jenny: But see, they're kind of not really – it's not really a class. They just hand out worksheets and you do it the whole time. So there's not – she won't really answer your question. And it's not for a grade, really. It's just kind of extra points, maybe. I'm not sure how she adds it all up.

John: Is that important?

Jenny: I don't think they're that important, so I don't spend a lot of time trying to do it.

John: No, the fact that she doesn't – you're not even sure how these things factor into your grades. Is that important?

Jenny: No. Because if I don't know how – I don't think it costs that much -- I mean, not costs. I don't think that it really brings up or down your grade any. So I guess if it was a big part of it, then I'd probably try to spend more time on it. But I don't.

Jenny's perception that that the assignment had little short-term extrinsic value was implied by her comment, "I don't think that it really brings up or down your grade any."

Jenny also signified that she perceived little intrinsic value when she said, "I don't think they're that important." Combined, the lack of intrinsic value and extrinsic value led to Jenny's choice not to engage.

Concrete Relevance: Part II

Through the years, students hear adults espouse reasons why certain children should “do” certain things or “learn” others. Some concrete comments made by Jenny and Missy show that they might have been listening to the adults, but their judgments held little water. When I asked Jenny about some relevant content she was learning in school, she responded with a statement about the United States Constitution.

Jenny: Well, I’m not really sure if anything important that we’re learning right now.

Maybe the Constitution. I guess that’s kind of important because if you got arrested or something, you might want to know your rights. So I guess that’s pretty important, to know your rights and things like that.

My beliefs are strong that American children should become familiar with their Constitutional rights, and I feel certain that this attitude comes across to my students.

Jenny’s comments show a rudimentary understanding of this, but nothing more. Missy talked about science content in much the same way.

Missy: It’s interesting, seeing as how I like—I mean, I just think it’s interesting. So that way you know what you’re looking at if you pick up a rock some day. You know, knowing somebody else, you might pick up a rock and throw it away and it might have been something important.

Missy’s science teacher strongly encouraged students to search for the importance of the content she was teaching them. Missy and Jenny’s comments together show that they were searching for the relevance, but may need more guidance.

Personal Experience

Though only Jenny even offhandedly recognized social studies formally as a class that teaches intrinsically valuable content, when the September 11, 2001 terrorist attacks occurred, all four participants recognized social studies as the class where it should be discussed. Bob shared that he had completed a social studies report on Afghanistan in the year previous to the attacks and hadn't thought it was a very important or relevant place to study. In the wake of September 11, Bob could not satisfy his thirst for related information. The comparison between the two time frames and the intervening events cannot be understated.

Bob: Because all the stuff that's going on with that country, I'd like to learn more about it so I know what they're talking about...I wasn't very interested in Afghanistan [last year] due to the fact that it didn't influence me at all.

Greg shared the same sentiments with me. The personal experience and relevance of the content related to Afghanistan and the Muslim world created interest that was absent before the attacks.

Greg: ...it [the September 11 attacks] was just a really, really interesting subject. If it's a really, really interesting subject, I just focus really hard...It was going on in our nation as we were talking about it and it wasn't past. It was present.

Both boys' comments concerning the attacks were related to the student interest category.

Bob and Greg's personal experiences created emotional relevance to the topic. This emotional relevance in turn created content value, which had a strong influence upon their motivation to engage in learning about the various factors related to it.

Student Interest vs. Disinterest

Once classroom climate was accounted for, student interest was the most important influence on Bob, Missy, and Jenny's decisions to engage in learning. Greg had a different perspective on this, but interest in a topic strongly influenced his willingness to engage in learning as well. While my participants were willing to relate various unmotivating teaching methods, they were eager to describe numerous methods that their teachers had used to gain and maintain their interest. This section will focus upon teaching methods. After a short subsection describing disinterest and boredom, it will be generally broken down into two larger subsections: teaching methods that allow students to be more passive in class, and teaching methods that encourage students to be more active in their learning. Each of these subsections will be broken down into smaller subdivisions. Passive learning will be subdivided into textbooks and worksheets, while active learning will be subdivided into simulations, hands-on activities, games, and group work.

Disinterest and Boredom

My participants spoke of boredom in school more often than they did of being interested and excited. The state of boredom negatively influenced my participants' motivation to engage in their own learning, but did not cause a lack of motivation. In actuality, boredom was a state of mind resulting from disinterest that was based upon a variety of situational sources. Among these sources were a combination of classroom climate, having their needs ignored, lack of value and relevance, and teaching methods.

Classroom climate was a major influence on Jenny, Missy, and Bob's state of mind. Each of these students related experiences that illustrated how their perception of

various aspects of negative classroom climate influenced their desire to engage in learning. When these students became disengaged in the learning process at school, they quickly became bored. Throughout data collection, boredom was a word used often to describe their state of mind during negative classroom experiences.

If an appropriate classroom climate was accounted for, all four participants were prepared for learning. It appears that most of their student needs could be accounted for through either the classroom climate or the teaching methods, while the students' perception of the content's relevance can be accounted for in the teaching methods as well. Throughout data collection, all four students expressed their belief that poor teaching methods were at the core of their boredom. During the group interview, all of them sensed that this was the last time their viewpoints would be formally heard.

John: ...What suggestions do you have for teachers who wish to motivate their students?

Bob: Don't make it so boring.

John: How would you go about not making it boring? Any of you.

Greg: Just the fact that—interactive activities.

John: Such as?

Bob: Science labs. They aren't always fun but better than some of the stuff we do.

Jenny: Like my science teacher, usually she'll read stuff right out of the book or from notes she takes before we start class. And I think that is really, really boring...

Bob: One thing you could do is rather than just speaking about rocks, that's what we're studying, and that's not really much excitement there so since it's already so boring, you don't want to just talk about it the whole time. You want to do some

stuff with it like do labs to identify the rocks. That's not all that great, but it's better than sitting there talking about rocks, minerals and soil.

Jenny: I agree with Bob.

John: How about you?

Missy: I agree with everything that they've said.

All four participants were passionately opposed to passive learning methods, claiming to be bored by them. All of them were avid supporters of methods that allowed them to be active; claiming they were provided excitement and/or fun. While participants were brainstorming teaching methods that they find to be motivating, Missy sent a more general message.

Missy: I think that if you do like a variety of lessons, like each day, then, you know, instead of just doing like notes every single day, then, you know, that way they'll have like something different coming out of each day and they won't get bored by it.

Greg: If I was teaching the subjects, I would do bookwork sometimes, but I would not do bookwork all the time because that just makes the kids like go to sleep and everything. You have to do some type of activity like hands-on or like some sort of game or movie.

All four participants indicated mature understanding that teachers would likely be unable to provide exciting lessons for their students every minute of every school day. Missy and Greg provide reasonable suggestions. They claim that, in order to maintain student interest, a teacher needs to vary the type of assignment. The rest of this chapter is devoted

to illustrating specific aspects of passive learning and active learning that my participants found to be unmotivating and motivating.

Passive Learning

All four participants discussed different aspects of lessons that were more passive in nature that disengaged them. During one observation, I watched Jenny yawn behind her paper while the teacher offered notes from an overhead projector. I observed Bob making faces while his math teacher worked through math problems. Missy provided me with her old notebook from her hated social studies class, and I noted that most pages had multiple pictures doodled on them. Greg claimed that teachers could “just about put me to sleep” when teachers assigned textbook work consistently and for long periods of time. Though I observed a disengaged Bob, Missy, and Jenny taking passive notes, and Jenny specifically described note taking as a boring activity, the two most common lessons my participants associated with passive learning were textbook work and worksheets.

Textbooks. Both Bob and Greg said that they had shorter attention spans when teachers assigned textbook work, and both indicated that other methods were preferable to textbooks. Greg pointed out to me that he had a more difficult time concentrating on textbooks. Bob and Jenny were the most vocal about the negative impact textbooks had on their willingness to engage in learning, but all four students expressed a strong dislike for this medium.

Jenny: ...I don't like book work and most of the time I just put down whatever a quick answer is. I don't spend time working on it or anything...[I] Just write down whatever answers in the book, I guess. I don't – usually I just go back and look

and find an answer, instead of trying to think of -- actually think of what I've learned and stuff. Just put down whatever answer I can find in the book.

Jenny told me that textbooks do not require a whole lot of thinking, and that she is encouraged to work below her grade level when answering the basic questions at the back of each section and chapter review.

Bob told me that textbook assignments brought out the worst in him. He is clearly disengaged from learning during textbook assignments. He told me that, "I'll just be looking at the words rather than actually reading it." Why?

Bob: They're just incredibly boring and I can't really do much with them so all you do is read them. I don't really absorb much information from them...I don't like to do that, so I don't really work that hard on it...But I'll still do it. I just don't really want to.

These are Bob's ways of saying that, during this type of assignment, he is not engaged in learning—his focus has denigrated to an exclusively performance oriented lesson (Dweck, 1989). Bob wants to finish the "boring" assignment as quickly as possible, usually without learning. Jenny agreed with Bob. She claims that textbooks do not have enough detail, and that makes them dull.

Jenny: It's just books, I guess. Because I don't think books teach very well because I don't think they go into as much detail. They usually just give you the little, tiny main things. But most of the time if you just get from other sources or you just talk in front of the class and don't read out of the book, then you get more details and understand it better.

Jenny and Missy suggested that teachers seek alternative sources for their students in order to prevent boredom. They suggested that teachers utilize novels (fiction or non-fiction), magazine articles, computer programs, and the Internet. They were not suggesting that textbooks be eliminated completely, just used more wisely.

Worksheets. All four participants disparaged worksheets as boring and useless activities. Minimal effort to complete them was usually described by the students. Jenny told me several times that she would finish worksheets quickly then pretend to continue working—especially when she expected the teacher to provide finished students with more worksheets.

Jenny: Math was really boring because we would have to sit there for two hours straight doing worksheets and we didn't get to talk a lot or get in trouble. And she, if she talks, it wasn't very much. So most of the time it was just work out of the book or worksheets.

Greg agreed with Jenny, indicating that he had a difficult time concentrating on worksheets. In fact, the lack of interaction between teacher and student was disturbing to him.

Greg: I don't think they're [worksheets] very effective, just for various reasons like they're not a very fun way to learn it and they're just not a very good way because the teacher's not talking to you. They're just giving you worksheets to learn it from the worksheets, not from them. Which they're supposed to be doing. And they're the ones who really get it, not the worksheets.

On the whole, all of my participants told me that worksheets were one of the most unmotivating methods of learning. They perceived worksheets as mindless, and claimed that they did not lead to learning.

Active Learning

Each of the four students indicated that becoming involved in their own learning was more likely when they had the opportunity to interact. Sometimes the interactions were physical, while other times they were virtual. In any case, I have broken down the types of active learning into four subdivisions: simulations, hands-on activities, games, and group work.

Simulations. Physical activity, actual involvement in an activity that includes interaction with others (or a computer simulation) who are also physically involved in the activity was a strong motivating factor for each student. The physical activities that each student shared with me usually included interaction that forced them to work cooperatively with others and to act upon informed thoughts. Once the students acted, they were usually faced with immediate feedback based upon their first decision. Students learned from the immediate feedback and were forced to think on their feet. Greg described a field trip that he claimed to have enjoyed. It was especially meaningful because of the content it covered. Greg had earlier described his dislike for science content.

Greg: ...And then probably my favorite field trip would be in sixth grade and we went to the Museum in North Carolina...we got to like pretend we were in a space shuttle and be actually the person in the space shuttle directing it. They gave a

certain job to each of us...The work, I hate the work in science because either we just do worksheets or we do chapter reviews usually as our work, or take tests.

It was not the science content that Greg disliked, but the “boring” activities his teachers had chosen to teach with. Bob had similar experiences.

Bob: My absolute favorite I can remember was Frontier vs. European style warfare. And in science I like to do all the experiments.

Bob: Yeah. We did frontier versus European style warfare. First we just did European. We threw Wiffle balls at each other. And then we went up into this little area of pine trees as the frontier people and the rest of them marched like the Europeans would. And it taught us how the frontier people had more of an advantage, even though they weren't organized, over the Europeans. And that taught us a lot about Lexington and Concord. Once we got to that, we realized that's what they [the colonists] did...I'll remember it pretty well because I had fun doing that. And just the fact that it was fun, it makes me remember when we did it. And I also remember what information we're getting from it. So it makes it fun.

During our group interview, Bob talked about this lesson again. This time he became more descriptive in how it helps him to learn.

Bob: ...And when they're talking about that [frontier style warfare] in the book they don't actually say that the frontier [fighters] would guerilla fight...But when we went out there and the frontier people went in the woods and the European team walked by, the frontier people had a lot bigger advantage than walking in straight lines. The frontier could just shoot at them without standing in lines.

Jenny agreed with Bob, and followed up his comments with a more generalized statement that was intended to explain what Bob meant.

Jenny: I think you learn better when you do interactive things with learning. So, I mean, you can still read it out of the book, but then if you actually do it in real life, I think you'll remember it more.

Without exception, all four participants claimed to have been actively involved in learning during every activity that incorporated active learning. They consistently asserted that simulations were the most motivating teaching methods. My observations concurred with these statements.

Hands-on activities. All of the participants discussed using their hands in their learning as motivating. Greg was less concerned with using his hands than the others, but claimed that if an activity was fun then he would be motivated to work on it. Science was the most commonly discussed class where students were given the opportunity to work with their hands in lab conditions. In science classes where hands-on activities were absent, the participants were more disparaging of the content and to the class as a whole. When opportunities to use their hands were present, they perceived the class to be fun. Missy, Bob, and Greg smiled, laughed, and shared stories about a recent science lab on erosion that incorporated using their hands. Meanwhile, Jenny complained that her separate gifted science class was boring because they were “always taking notes and working out of the book.”

Games. Greg was a willing student for most activities, but became more energized when “the fun factor” was added. Greg told me about several games (Family Feud, Who Wants to be a Millionaire, Jeopardy, and The Weakest Link) that he had played during

his middle school career. He said that games get him thinking about the content when the lesson is in the form of a game. He was the most competitive student in the group of four, and claimed that the excitement and interaction involved in playing cooperative and competitive games in class motivated him to become sharper.

Greg: One of the games, for example, would be Jeopardy. And that would be a lot of fun because we get really involved. We'd have two separate teams and basically we'd go side-to-side and get the answers. And if you got it right, you get the amount of points on the board. We'd have like five categories and then a separate category, which could be anything from the past or like from a TV show, for all we'd know.

John: When you're playing a game like Jeopardy, what's going through your mind while the questions are being asked?

Greg: I've got to be the first to answer it...we get to be – we can put more into the game. We can like – our whole group could like – I don't know how to word this. But we'd be more into the game. And I'd be more into the games than the worksheets.

While Greg discussed games as a teaching method, he favorably compared them to worksheets. Throughout their comments all of the participants used textbooks and worksheets as examples of passive learning. Bob described how games had been used to make textbook lessons more interactive.

Bob: ...We've used certain games like Jeopardy or Who Wants to be a Millionaire, where we write down our own questions [created for the game by students from textbook passages] and when we're writing them down, we get the answers [from the textbook] to the questions. And then when we're playing the game [using

student-created questions] and you hear people saying the questions and answers, you get it more if it's a game...It keeps your attention and it makes it more fun to learn about it. But during a game, you don't usually let your attention go away.

John: I see. And before the game starts, while you're actually looking through the textbook, knowing that the game is going to happen later, do you do anything different with the textbook?

Bob: Yeah. I'll try and get good questions so if I get to read the questions off, it will make it more fun for the people that are answering the questions, make it a little harder. And just the fact that we're going to play a game with all the questions, I like to get good questions.

John: Knowing that you might be a contestant in the game, do you have to know something more about the textbook than you would, say, outlining it or something?

Bob: Yeah. I'd probably go more into what it's saying if I'm going to be a contestant because people like to make the questions really hard, so knowing that I might be a contestant, I'll read it through real well so I'll be able to do real well as a contestant...I'll get it more that way rather than just reading it and nothing fun about it.

Games stirred the competitive juices of both Greg and Bob. Jenny and Missy also claimed to have been "excited" by the game format. Like Greg and Bob, Missy tended to seek the leadership roles whenever possible. Consistent with her tendency to want to blend in, Jenny preferred to play an involved but quiet role in the games. She often sat close to the team captain and whispered answers in the captain's ear rather than have

attention focused on herself. Games did not necessarily need to be competitive to gain every participant's attention. Missy described being interested in a computer-assisted game.

Missy: And we went to the computer lab and we did this fun little game. And it was about – it maybe took about two, three days. It was called – they were AfricaQuest, AsiaQuest and I think it was Quest to Europe. But I'm not sure. Anyhow. So we did those and you had—they came up with questions and you had to answer the questions as you read along and you learned about like the Middle East or Egypt or whatever.

John: How does that compare to working out of a textbook or working along with other—

Missy: It gets you interested. It gets interesting. Because I mean they'd have like some gross stuff and then they'd like – now, some kids, I mean, they'd want to read along, you know, to get to learn more. And sometimes there would be like cool stuff. Like – it was just, it was neat...they'd always have these little mystery things and you'd have to go in there and you'd have to see if you could guess what it was. And then if you scrolled down, it'd tell you about what it was and then it'd go into facts about what it was. It was neat. Because then they'd have like this little quiz or something and then – it was interesting.

Like Greg, Missy claimed to be interested by the interactive nature of the game. In her case, it was not always about competition, but the method of presentation was perceived as fun. Missy became willing to scroll down the screen and learn more about the

“mystery things” by reading—something she laughed at when I asked her if she would do that with a traditional textbook based lesson.

Group work. The social aspect of group work appeared to lead to interest in most cases. It also fostered social constructivist learning for Jenny, Bob, and Missy. I approached this topic during our group interview session.

Bob: ...[the] good thing about group work is sometimes one person in a group will see something the rest of them don't. And when they see that, the rest of the group probably gets it a lot more than they did because of this one person. And when you put them all together, you all learn something that someone else knew, but you didn't.

John: Uh huh.

Bob: So that works out pretty good.

Jenny: I like it when we have a variety of different choices that we can do for the project, even if it is just on one subject. Like when we were doing volcanoes or something, like the artsy type people, they could do like a model. But the people that like to write, they could just like do a report.

Bob: Like when you have a bunch of different things for one subject, then you just take groups and then just putting it altogether with each group doing part of the work, of course then there's certain causes of the Civil War, that works a lot better than each group doing the same thing and listening to group after group share the same stuff. It's not really exciting. It's a lot better when you have different things.

Greg: I agree on what Bob said.

Jenny: So do I.

Missy: Same.

The participants generally agreed that group work led to positive and motivating learning experiences. On the other hand, both Bob and Jenny had earlier described bad experiences with group work. In addition, Greg maintained that he was concerned with the effect group work might have on his grades. The almost universal agreement on the negative aspects of grouping made it extremely important to follow up. With all of the question marks, I decided that this was a valuable concept to probe during the group interview. The responses came fast and furious.

Missy: This year we did a project and I had—there was two guys and three girls. Me and my friend did like all the work and then the two guys were always goofing off, playing around, and the other girl was sitting there watching them, laughing at them. And she had like hardly any part in it. So we went up and asked the teacher if we could just go ahead and just break off from the group because we were just like so mad that we were doing all the work but yet they were getting graded on it.

Bob: Even if there is two students out of a group of four that's doing—that are really good students and doing the work, if we have to present it, still our grade is going to go down because the other two students have to participate and then when they're presenting some information, they don't know what they're talking about and they aren't sure what to say. So it makes it a lot harder.

Greg: I agree on that idea which Missy said because I had a math project last year where our teacher picked the groups and that's basically what she said. We had like three people in your group and two people did it and one person just sat out and just did nothing.

Jenny: Usually when they sit out, I don't think that people really want them in their group anymore. If they have to do another project, they really hope that they don't get them because it's really hard for—because it's frustrating when they don't do anything and you feel like you've got all the work put on you.

Bob: And then they still get the same grade you do, since it's a group. They all get the same grade usually. Unless the teacher sees them not participating, then their grade usually goes down.

Missy: We just got through with this project in orchestra where we did a group with our sections. And for the—see, I play the viola and see, for the viola section it's really difficult because there's these two girls and they're like best friends and they like—they sometimes, they get on my nerves because we were doing the project and they would, they said that they'd do their own thing and they would do a poster and then we would do our own little PowerPoint presentation. Well, it ended up that their poster was the worst project that the teacher laughed at it. So they were hoping that I had put the names on the project so that way they could get the grade. And they said that they did work, too, but I was just like, “No, y'all didn't.” And so they got the grade for the poster and, which the teacher was very generous. And me and my stand partner, we got like—like, she really liked it. She wished that the class would have gotten a chance to see it. But we had to walk up to her and just say that they had no part in our project. They had nothing to do with it. So...

The existence of passive participants in group work was clearly a phenomenon shared by all four students. In addition to the formal interviews, I had spoken to all of them

informally about the issue. Both Jenny and Bob had indicated to me that they had been the passive partners on some occasions. When I followed up on this during the group interview, I was not expecting the reaction I received.

John: How about the times when you might have been one of the passive partners?

Jenny: Sometimes when I don't understand the project and you've got the extremely smart person in your group, it's kind of hard to get into it when they have—like they won't let you talk. And then you kind of sit out and you don't know how to help because it's going right over your head and if you try to say something, they'll think, "Well, that's really stupid." And you just kind of sit out.

Bob: If, like some people may think that you're pretty dumb and if it's really smart people. And then you try to get in to work with the project and they're like, "Oh, you're stupid. Don't say anything!" And then so I just sit there and then they do the project. And then, okay.

John: I was going to say, I see Greg nodding his head over there.

Greg: Agreeing on what Bob said. I agree with what he said because sometimes you have—I mean, sometimes you have two friends and then you're like the lone one out and they think you're stupid, like Bob said. And then they don't even let you work on the project. They think like he said, they won't let you talk and give information to them even if you found some.

Bob: And other times, if you want to start working on it, they sometimes get mad and just say, "Fine, you do it." And then I'll just start doing it and they'll just sit there. It just switches off.

John: Okay. So it doesn't necessarily have to do with intelligence then?

Bob: No.

John: It's the interaction between the students/

Greg: Yeah.

Bob: When the teacher makes up the groups, just picks random people, usually it just happens to always be someone I don't like. And either they'll leave me out or I'll leave them out sometimes.

John: Let the record show that everybody was nodding except Greg who was about to say something anyway.

Greg: Okay. On when the teachers pick the groups, they pick them and by rating their level of intelligence that they think the other people like, they go by—I think they go by grades when they pick the groups that they've got on another assignment or they've worked on before. And I think they try and put like one extremely smart person that understands it, one like mid-class and one lower class person that understands it – that doesn't understand it.

Bob: I would agree with that sometimes, but just the fact that looking at grades and then putting the groups together, sometimes it seems that way, but I don't think they ever actually do that.

Jenny: I think that when the teachers put the groups together, I think they also do it by how the kids act in class. Because usually they'll try to have one really good person that sits and listens, too. And I think that when you're in groups with your friends and the teachers don't pick, then everybody does the work and you don't have people left out.

Greg: Agree.

Bob: When the teacher doesn't like to let the students pick the groups—

John: Uh huh.

Bob: Because they think we're all going to pick our friends and then just goof off—

John: Uh huh.

Bob: But usually I notice when we have group presentations, it works out a lot better when it's your friends because then you get to interact with your friends and then you start doing more work.

This interplay between the participants illustrates how classroom climate, student needs, and student efficacy interact with one another to create interest. All four students stated that group work was generally a positive and motivating experience for them. Their social and social constructivist needs could be met through group work. All four of them also claimed that there were times when the politics involved in group work led to one or more members shutting down.

Their strongest complaint was teachers' assigning groups rather than trusting students to do it themselves. Their insightful attempts to figure out why teachers insist on assigning students to groups (according to ability level, personality, or student behavior) showed that they had pondered this before. Autonomy aside, the meaning behind their concern over this issue settled on the most important aspect of classroom climate: mutual respect. Speaking openly, the students perceived that their teachers did not trust the students' judgment when assigning groups.

Chapter Summary

This chapter cross-analyzed the perceptions and school experiences of Jenny, Missy, Bob, and Greg. Starting out with comparisons of their epistemological beliefs and

achievement orientations, I compared and contrasted their perceptions and experiences on five other topics: Classroom Climate, Perceived Student Needs, Locus of Control-Student Efficacy, Relevance or Content Value, and Student Interest vs. Disinterest. The students' orientations to achievement each contained contrasting characteristics, with Greg leaning strongest in any one direction (performance orientation).

The only motivational category that appeared to have a strong influence upon all four participants was student interest. Classroom climate had little influence on Greg's willingness to learn, but was probably the most important situational characteristic for each of the other three. Each participant had some similar as well as some unique student needs, though each influence on the individuals varied. Students' confidence, whether it be stable (long-term) or situational (short-term), were important in determining their willingness to engage in learning. Since these levels varied from participant to participant and situation to situation, the motivational influence was also varied. Perhaps the most ineffective concept was content value. Each student appeared to find their own reasons for "valuing" content, with most of these reasons being extrinsic or external in nature.

CHAPTER IX

CONCLUSIONS AND IMPLICATIONS

Introduction

This research adds to the literature by illustrating in-depth and meaningful data that have been derived from my participants' exclusive perceptions of motivating and non-motivating school experiences as viewed through the lens of my conceptual framework. This study advances theory by offering researchers four case studies and a cross-case analysis as examples of an alternative method for categorizing and analyzing the various facets of student motivation. The findings of this study can be considered generalizable to the extent that those who read it might recognize and transfer certain qualities, characteristics, and concepts from the individual case studies and/or the cross-case analysis to their own perceptual experiences. This final chapter explains how the data obtained and analyzed answered my original research question, discusses my current views, makes suggestions for future research, and discusses the implications for middle school teachers.

Answer to Research Question

I believe that my research question, "What are middle school students' reasons for choosing to engage or not to engage in their own learning in school?" has been answered thoroughly during the course of this study. The grounds for individual and situational choices on whether or not to engage in learning were provided by my participants and

told through their perceptual experiences. The reasons for these choices were multifaceted and varied.

The data were broken down into five general motivational categories during chapters four through seven. In chapter eight, I included an extra section to cross-analyze the participants' epistemologies and orientations to achievement. It is appropriate to present the complex answer to the seemingly simple research question in much the same way. This section will be subdivided into five sections: Classroom Climate, Student Needs, Locus of Control-Self Efficacy, Relevance-Content Value, and Student Interest vs. Disinterest. I will weave the individual epistemologies and orientations to achievement through each of these. At the end of this section, I have included a table to summarize each participant's reasons for engaging in learning and a table to summarize each participant's reasons for choosing not to engage in learning.

Classroom Climate

Throughout the course of the study, the data consistently showed that classroom climate was a strong indicator of Jenny, Missy, and Bob's willingness to engage in learning. The classroom climate had little bearing on Greg's motivation to learn. I concluded that, though Jenny, Missy, and Bob possessed elements of performance orientation (Dweck, 1989), they engaged more intensely in actual learning when they were engaged in learning orientation. When engaged exclusively in the performance orientation mode, they did not experience Oldfather's (1992) continuing impulse to learn or Brophy's (1982) motivation to learn. Instead, they disengaged their minds and, at their best, worked at a minimal level intending only complete the work.

With this in mind, each of the three became exclusively performance oriented in classes where they perceived the classroom climate to be negative. In classes where they perceived the climate to be positive, their orientation to achieve was more likely to change to a learning orientation, where they became more willing to engage in thinking and learning. Jenny, Missy, and Bob's willingness to engage in learning did not always translate into engagement. Classroom climate was never the reason these students chose to actively enlist their minds in learning; it was only a prerequisite for their willingness to engage. Other features appeared to be necessary to influence these participants to take the next step and actually become engaged.

Since three out of the four participants perceived that positive classroom climate was an important prerequisite to their willingness to engage in learning, their perceptions of what characteristics constituted positive classroom climate and negative classroom climate became significant. Perhaps the most important aspect of classroom climate was my participants' perception of the teacher and their relationship with the teacher. My participants claimed to enjoy a positive classroom climate when they perceived that a teacher treated them as individuals with honor and respect, when the teacher had a sense of humor, and provided students with autonomy commensurate with their age. On the other hand, my participants experienced a negative classroom climate when they perceived that their teachers were controlling, openly disrespectful to the students, and/or did not treat the students as individuals.

Jenny's perception of the classroom climate interrelated uniquely with her weak self-efficacy and her unwillingness to ask questions in class. Jenny possesses numerous hidden but real fears that were exacerbated in a classroom with a teacher whom she

perceived to be controlling and/or disrespectful to the students. When she experienced this stress, Jenny often chose to deal with it by disengaging her mind from the content under study. She called this autopilot. When Jenny chose to reengage, she was often confused because she missed important concepts or skills while “zoning on autopilot.” This appeared to have an influence on her perception that certain subjects were out of her locus of control. Her confidence in her abilities diminished while her perception of the climate discouraged her from acting to bring the content back within her locus of control. In similar ways, negative classroom climate was harmful to Bob and Missy’s motivation to engage in learning as well.

The fact that Greg was virtually uninfluenced by the classroom climate stands out as well. I concluded that Greg’s extrinsic and pragmatic view of education along with his resilient and almost exclusive performance orientation (Dweck, 1989) were responsible for this. Greg views his education as an important but largely tedious job. He is clearly goal oriented, and sees school as the means to achieve his long-term goals. Greg’s ability to maintain that focus among unpleasant situations as well as pleasant ones was unlike the others.

Student Needs

All four students had needs that influenced their willingness to engage in learning. Some of these needs were prerequisites to some of the participants’ willingness to engage, such as positive classroom climate. Other needs seemed more like proverbial carrots, enticing the students to choose engagement over disengagement. Of Scales’ (1991) seven key developmental needs that generally characterize adolescent students, the most obvious and prevalent needs displayed by the students in my study were the

needs for positive social interaction with adults and peers, physical activity, and competence and achievement. Secondly, my participants expressed a lesser need for structure and clear limits, creative expression, meaningful participation in school communities, and opportunities for self-definition. In addition to Scales' list of needs, my participants appeared to have a powerful need for autonomy through individual choice, and in some cases, the need to avoid stress.

Relationships with peers. The data showed that all four participants were positively influenced by opportunities to interact with their peers. The participants' perceptual experiences along with my observations illustrated that social opportunities through group work often led to social constructivist learning. On the occasions, however, when social interaction was present while individual choice and a clear structure were absent, the group work was ineffective at best. The students claimed that group work was most efficient when teachers trusted the students to choose their own partners. They tended to perceive teacher assignment of groups as controlling and limiting to their autonomy, while seeing student choice as teacher acceptance of the student need for autonomy and proof that the teacher trusted their judgment.

Relationships with adults. The most surprising need once again came from Greg. Though Jenny, Missy, and Bob needed to perceive positive relationships with their teachers as a prerequisite to their willingness to engage in learning (see classroom climate), Greg's attempts to build and maintain positive relationships with his teachers appeared to have a more active motivating influence on him. His need to be recognized by his teachers as an extraordinary student uniquely motivated him to consistently engage in extensive and comprehensive learning.

Active learning. All four participants appeared to have a strong need for active learning. This need is closely tied to the classroom climate category and the student interest vs. disinterest category. In order for students to be willing to engage in physical activities, three of the four needed to feel a sense of a positive classroom climate. For all four students, active learning usually led to their perception of a lesson, the content, and a class as fun, exciting, and/or interesting. Passive learning tended to have the opposite effect. Specific types of active learning and teaching methods used to attain active learning will be discussed in the student interest vs. disinterest subsection.

Locus of Control-Self Efficacy

The participants in my study each expressed their situational and stable perceptions of their abilities. These perceptions were powerful indicators of each student's willingness to engage in a learning activity. Though standardized test scores would contradict her perception, Jenny was undoubtedly the participant with the lowest level of self-confidence. On the other hand, Greg possessed an overabundance of confidence in his abilities. Missy and Bob remained fairly confident in their stable abilities, but showed situational variation in confidence. All four students illustrated that an internal locus of control was necessary for them to be willing to engage in an activity. In this way, the locus of control was generally another prerequisite to my participants' willingness to engage in learning.

Greg's overwhelming confidence in his abilities made it easy for teachers to create situations where he was confident in his success. For Jenny, Bob, and Missy, situational variables had a strong influence upon their willingness to engage in learning. Though they sometimes blamed themselves for a lack of ability, they usually blamed the

teacher when they perceived the locus of control to be external. When they perceived the teacher to be at fault, they claimed that it was either due to the teacher's refusal to answer questions, the teacher's creation of a competitive classroom climate (e.g. students were not allowed to ask each other for help), or the teacher's incompetence (e.g. teacher lost the students' work, teacher did not teach content properly). Their perceptions that certain lessons were outside their realm of control generally led to partial or complete mental shutdown. Their perceptions of external loci of control were sure to lower the chances that my participants would choose to engage. In Greg's case, only a hypothetical situation resulted in this type of shutdown.

The participants' perception of the locus of control appeared to have the smallest positive influence on motivating them to engage in learning. Bob was the only one to illustrate an active motivating effect of an internal locus of control. After a poor seventh grade math year where he perceived an external locus of control, Bob was motivated by his perceived ability to understand the eighth grade math.

Relevance-Content Value

The students' perception of school content's relevance was perhaps the most surprising aspect of my findings. It appears that the students' perception of the value of content they learn in school is either concrete, extrinsic in nature, or noticeably absent. The relevance of most content, concepts, and skills that they were studying in school were not perceived as overtly important to their present life. In addition, they perceived little of the detailed content and skills they were learning to have a fundamental value to their future. They generally spoke of reading, writing, and basic math skills as necessary to their life outside of school.

In a subconscious way, the participants may perceive elements of the school content to be valuable such as world events and conflict, but the intrinsic motivational aspects of the content seemed to be virtually nonexistent. Prior personal experience (Missy and Bob) and perception that the content might help them in future school endeavors (Greg) appeared to have the strongest impact upon my participants' motivation to engage in learning. In order to motivate students to learn, it appeared that the participants' perception of the content's overt relevance was influenced more by the nature of the teaching methods than anything else.

Student Interest vs. Disinterest

My participants' perception of their interest in or lack of interest in an activity was the most dominant influence on their decisions to engage or not to engage in learning. Their tendency to become either interested or disinterested in school was unmistakably situational. In other words, none of the participants claimed to be exceptionally interested or disinterested all of the time. Each participant shared numerous school experiences with me describing what situational qualities influenced them to become interested in school. On the other hand, all four participants claimed to be bored in school often.

Interest. Interest in an activity was actually a symptom resulting from a number of other influences. It abounded with important links to most of the other categories. In all four cases, individual student perception of a positive classroom climate provided my participants with the necessary background to perk their intrinsic interest. Depending upon the classroom climate and the individual needs of each participant, meeting certain needs (e.g. positive interaction between peers, active learning) created interest. Students'

abilities to make relevant connections between the content under study and prior personal experience were somewhat influential to two of my participants' interest.

Though clearly swayed by the other categories, the most influential factor that led to student interest was the teaching methods employed by the teacher. My participants were inclined to become interested in content when the lessons employed by the teacher required them to be active or interactive. The teaching methods most commonly cited by my participants were simulations, hands-on activities, games, and group work. The physical nature of most of these teaching methods often appeared to arouse the interest of my participants. Once they were interested, they often became engaged in cognitive and/or social interaction related to the content.

Disinterest. My participants described the state of mind that resulted from their disinterest as boredom. Boredom was also shown to be a symptom resulting from other influences. It was also clearly linked to lack of engagement, and in the most extreme case, disruptive behavior. The most common causes of my participants' boredom were the student attitude resulting from negative classroom climates and teaching methods. As it turned out to be with most aspects of their motivation, disinterest was generally not a simple issue for my participants. Not only did classroom climate influence my participants' attitudes toward a teacher and a class, but it also influenced their attitude toward the content. Except for Greg, my participants claimed to be turned off by certain teachers and classrooms. In those negative situations, three of the four participants never even gave the content a chance to interest them. All of my participants claimed to be bored by the useless nature of content in classes more often when they disliked the teacher and perceived a negative classroom climate.

Though influenced by the classroom climate in most cases, the teaching methods were even more influential on the participants' situational perception of the school content. All four students claimed to be bored during lessons they perceived to be more passive in nature. When my participants were faced with lessons that did not require interaction, they claimed it was not necessary to think and their minds were usually disengaged—even when they completed the work associated with them. The teaching methods my participants cited most often as boring were those that incorporated textbooks, worksheets, and note taking.

Additional Findings

In addition to answering my research question, there were also some other interesting findings. Two of my participants had the opportunity to experience block scheduling during their middle school careers. Up until this school year, the academic team I was associated with had been working happily on a block schedule for four years. Having experienced this type of schedule and been unhappy with the flexibility lost when we were forced to revert to the traditional schedule during the 2001-2002 school year, I was interested in hearing how their experiences with a block schedule influenced participants' motivation to learn.

In recent years, the administration at Broken Arrow Middle School strongly encouraged teachers to engage in activities that they deemed to be progressive reforms. During one school year, the administration offered an inservice workshop to promote the block schedule. This workshop was presented by a teacher who attended a session on the nuts and bolts scheduling of students while visiting a professional conference. More of a promotional engagement, no detailed suggestions were provided to teachers describing

how they might change their teaching methods to be more appropriate for the proposed block.

With no additional training, some of the academic teams chose to experiment with block scheduling. The basics of block scheduling such as how to manage the additional time, how to reorganize lessons to fit the block schedule, and what to do with students for the larger block of time remained unanswered. Salvaterra and Adams (1996) claim that the flexibility generated by block scheduling can be used to help place the teacher in the role of facilitator as opposed to lecturer, leading to more creative instructional methodology, allowing for teamwork to develop. It became obvious to me after speaking to the two participants who experienced the block schedule that proper inservice was a necessary (but missing) component for authentic reform. Though the teachers had changed their schedule, most of them did not change their teaching methods.

While reinvestigating block scheduling literature, I came across recommendations from Hackmann and Schmitt (1997). Among other recommendations, they claimed that teachers should continuously engage students in active learning, include group activities to encourage student participation, incorporate activities addressing the multiple intelligences, use creative thinking activities, integrate and reinforce basic skills throughout the curriculum, and incorporate technology. Their list of recommendations for block schedule teaching methods was remarkably similar to the findings from this study. Apparently, good teaching methods are good teaching methods regardless of the type of schedule a teacher uses.

Summary

Students like Greg are easy to motivate. In fact, his strong and focused performance orientation is almost impossible to disengage. Greg's strong reasons for motivation are not unique. I suspect that there are other "Gregs" in my own classes in classrooms throughout the nation. The students that teachers need to focus their efforts on those similar to Jenny, Missy, and Bob. Students like Greg are not likely to fall through the motivational net. None of the qualities that had positive influences on Jenny, Missy, and Bob appeared to negatively influence Greg. In fact, most of these qualities tended to encourage him to turn up his engagement an extra notch.

I will now revisit and summarize the answer to my original research question, "What are middle school students' reasons for choosing to engage or not to engage in their own learning in school?" This study suggests that each participant has his or her own situational and long-term reasons for engaging in learning. For a summary of the answer to the first half of this question, "What are students' reasons for choosing to engage in learning," see Figure 2.

It is problematic to summarize this complex question in a simple manner because each participant was normally influenced by more than one feature of motivation at a time. For a thorough understanding of how the students' reasons interacted to create situational motivation or to retard motivation, readers are urged to read chapters four through eight.

Was this a Reason Participants Chose
to Engage in Learning?

Jenny Missy Bob Greg

Positive Student/Teacher Relationship	Yes	Yes	Yes	Yes
Social Constructivist Methods	Yes	Yes	Yes	Yes
Peer Interaction/Group Work	Yes	Yes	Yes	Yes
Internal Locus of Control	No	No	Yes	No
Lessons Incorporating Higher Level Thinking	Yes	No	No	No
Interest in a Lesson	Yes	Yes	Yes	Yes
Hands-on Activities	Yes	Yes	Yes	Yes
Computer Assisted Learning	Yes	Yes	Yes	Yes
Content Related Games	Yes	Yes	Yes	Yes
Student Directed Learning	Yes	Yes	Yes	No
Perceived that Lesson was Fun	Yes	Yes	Yes	Yes
Methods that Involved Competition	No	Yes	Yes	Yes
Opportunities for Creativity	Yes	Yes	Yes	Yes
Content Might be Needed in Future Career	No	No	No	Yes
Getting in a Good College	No	No	No	Yes

Figure 2. This table asks and answers the question, “Was this specific quality of classroom life a reason students chose to engage in learning?” It summarizes participants’ reasons for choosing to engage in learning. If the answer to the question is “yes,” then the data indicated that this quality of classroom life was likely to influence the specific participant to engage in learning. If the answer was “no,” then it was not an influential reason the specific participant chose to engage in learning.

For a summary of the second half to my research question, “What are students reasons for choosing not to engage in learning?” see Figure 3.

Was this a Reason Participants
Chose Not To Engage in Learning?

Jenny Missy Bob Greg

Negative Teacher Relationship	Yes	Yes	Yes	No
Knowledge Based Objectives/Too Easy	Yes	Yes	Yes	No
External Locus of Control	Yes	Yes	Yes	Yes*
Fear	Yes	No	No	No
Book work	Yes	Yes	Yes	No
Worksheets	Yes	Yes	Yes	No
Disrespectful Teacher	Yes	Yes	Yes	No

* Hypothetically

Figure 3. This table asks and answers the question, “Was this specific quality of classroom life one of the reasons specific students chose NOT to engage in learning?” It summarizes participants’ reasons for choosing NOT to engage in learning. If the answer to the question is “yes,” then the data indicated that this quality of classroom life was likely to discourage the specific participant from engaging in learning. If the answer was “no,” then it did not have a negative influence on the specific participant’s choice to engage in learning.

My Current Views of Motivation as a Result of this Study

Though my theoretical framework remains the same, my views of student motivation have been altered as a result of this study. After my original pilot study back in 2000, I adjusted my theoretical framework to include the classroom climate category. Up to that point, I had included the classroom climate as one element of the student needs category. During the current study, the background provided by the classroom climate was vitally important in three of the four cases. It served as a prerequisite to a simple willingness for some students to even consider engaging in activities when possible motivation might be present from the other sources. This study has enhanced as well as reinforced my views on the significance of the classroom climate. In my view, it is

probably the most influential reason some students choose to open their minds to the possibility of learning.

My views on getting to know individual students were augmented to include the need to gain a strong understanding of a student's achievement orientation. Maybe it should not have, but Greg's strong and focused performance orientation surprised me. His strong extrinsic foci were unforeseen as well. I knew that Greg was a strong student, but I would never have guessed that he was as pragmatic about school as he turned out to be. In addition, the qualitative difference between Greg's approach learning and the others' had a noteworthy influence on their perceptions of the various motivational classroom characteristics. Though I have no way of knowing how it will influence his learning in the future, Greg's present tunnel-visioned performance orientation overruled almost every non-motivating factor he discussed and/or I observed. On the other hand, the others' tendency toward learning orientation influenced their susceptibility to other extraneous factors.

As is evidenced in the classroom context section of Chapter Three, I spend an enormous amount of effort attempting to illustrate the importance of the content I teach to my students. Though these efforts did not bear overt fruits with my participants, these students were aware that their social studies classroom was the appropriate one to make sense of our national crisis after September 11. I still believe that students are learning valuable concepts concerning human nature and interpersonal relationships, although they remain explicitly unaware of this. Although I am currently uncertain how I might effectively accomplish this goal, I believe that I need to be more clear and consistent in my attempts to illustrate how concepts I teach might be valuable to my students. The

difference between my current view and my former view is that I no longer have high expectations that this veiled relevancy will provide them with the motivation to learn them.

Instead, I have begun to think about the goals of my lessons in terms of how the teaching methods might provide students with influential learning orientations reasons to engage in learning. I am working to become more aware of signs that signify when certain students are working in the mode of one achievement orientation or the other. This study has had a significant influence upon my views of motivating students. I have begun to concentrate more heavily on creating relevance and student interest through teaching methods rather than the content.

Being a middle school teacher myself, this study has altered my own teaching. One example involves a combination of Bob's stated quest for fun and Missy's statements that she works better when she is in the mood. While reflecting upon which teaching methods I might use to motivate my students, I am now less inclined to absolutely reject motivators that I deem to be extrinsic in nature. I am still careful how I present them, but I do not reject them outright. In addition, though gaming has long been a part of my teaching, I find myself trying to put a game-like spin on otherwise boring assignments.

As a result of this study, I have become much more sensitive to the meaning behind Oldfather's continuing impulse to learn (1992) and Brophy's "motivation to learn" (1982). I have concluded that the classroom conditions that are necessary to create the continuing impulse to learn for some students must include the teacher's recognition

of each student's honored voice through respect for the student's individuality and thoughts.

Suggestions for Future Research

This study adds to the scholarly literature by building upon the motivational works of others (Oldfather, 1992). This study concentrated on perceptual experiences of eighth grade students at an affluent suburban middle school in the Southeast. The students who participated in my study all came from similar privileged backgrounds. Though the findings of this study are significant, the generalizations are clearly limited. I recommend that future researchers use my theoretical framework while concentrating on other communities of learners. Future studies might include case studies at different grade levels of middle schools, elementary or high schools; or at any level of schools in other suburban, urban or rural areas of the United States. In addition, I recommend that future research be done in a similar fashion on populations of at-risk, special education, and/or gifted students. It might be interesting to note the similarities and differences between students at public and parochial schools as well.

To a researcher willing to spend some extended time in the field, a longitudinal study of this sort might yield some interesting results. The researcher might begin his study by investigating the same aspects of his participants in the middle school in much the same way that I did, then follow the students and their perceptual experiences to the high school. Wells (1996) conducted a similar study on the transition from a progressive middle school to a traditional high school. An in-depth follow-up on the students' perceptions of their classroom climates and possible altered orientations might yield some interesting results. In addition, the context of the study might be altered to include

more about the participants' perception of the school climate as well as their perceptions of the individual classrooms.

Implications for Middle School Teachers: So What?

Those who work with students at the middle must possess special characteristics.

(Williamson, 1996, p. 384)

The countless hours I have spent talking with, observing, and reflecting upon my participants' individual and collective reasons for choosing to or choosing not to engage in learning have resulted in some strong implications for middle school teachers. My original goal was to learn more about what qualities of their school life influence middle school students' choices on whether to engage or not to engage in their own learning. My participants provided me with windows into their perceptual worlds that have alternately encouraged, discouraged, and in some cases, surprised me. The implications for middle school teachers will be subdivided into two main sections, Student/Teacher Relationships and Teaching Methods.

Student/Teacher Relationships

Though Broken Arrow Middle School has a dedicated and professional faculty, it appears that some teachers are either unaware of or unconcerned with how they are perceived by some of their students. Throughout the course of my study, my participants spoke often of their desires to build strong relationships with their teachers. Some of the teachers are perceived as unapproachable. As these students have developed into young adolescent teenagers, they have begun to mature. The relationships they seek are those based upon mutual respect. They are seeking professional relationships similar to those that adults seek to maintain with their peers and superiors at work. Student perceptions of

these relationships are profoundly influential to their motivations to learn. Becoming aware that student perceptions are important is the first step I recommend teachers take.

When taking the teachers' individual and collective goals at school into account, the perceived denial of this type of relationship met with devastating results. When a student looks into the face of a teacher and sees a sense of disregard or disrespect, how is she likely to respond? What are teachers attempting to accomplish each day they walk through the door of their classroom? If their goals do not include encouraging students to shut their minds off and/or discouraging students from learning, it might be important for teachers to take inventory of their own actions and attempt to see how students might perceive them and their relationships with the students. These relationships are the cornerstone of a student's professional life at school, and have a strong influence over how a student perceives his role in his own learning at school.

My participants also perceived that many of the teachers at Broken Arrow Middle School encouraged them to form professional relationships that are based upon mutual respect. The subtleties incorporated in this desire for a professional relationship were not readily recognizable in the data, but the implications are immeasurable. When the adolescent teenagers in my study perceived that they were shown respect, they reciprocated with responsible behaviors and a strong willingness to give the content in the class a chance. They indicated that the respect they desired was not only on the surface; they expected teachers to boldly act upon that respect by showing students that the teachers trusted their judgments.

Teaching Methods

I have a great belief in the fact that whenever there is chaos, it creates wonderful thinking. I consider chaos a gift. (Clark, n.d.)

Keller (1982) claims that instructors normally try to convince students that the content is relevant by making the instruction seem germane to present or future career. Whereas all of my participants seemed to believe this and even understand it, only one of the four (Greg) was motivated to engage in learning because of this. Using the future as a motivational strategy in the present appears to be mostly ineffective. My findings imply that, if teachers are looking to economically funnel their efforts, they ought to look at their teaching methods. Should a teacher choose to focus upon teaching strategies, students like those in my study will still be motivated—even if they are not enamored with the content under study.

Regardless, I recommend that teachers do both. During the times when teachers are pulling their hair out to explain the relevance of material to no avail, it would be in their best interest to concentrate more on the teaching methods. The teaching methods that will most likely influence students' motivation are those that allow students to be active participants in their own learning. Fundamentally, a simple reevaluation of teaching goals might lead to some important conclusions. Semantics aside, “teaching” students should not be the goal of a teacher. They should attempt to provide students with the most beneficial conditions for students to engage in their own learning. Teachers should attempt to interest students through active and interactive activities that use various teaching methods with a focus on addressing age appropriate needs.

Realistically, I recognize the abundant impediments teachers face that make it difficult to consistently create lessons that match the qualities of those my findings indicate. If teachers simply mix in varying types of assignments that eventually lead up to active ones, students might be more willing to engage in the passive aspects of a lesson—especially if students perceive that they can reasonably expect a regular variation in teaching methods. Some of the most successful active and interactive methods I recommend are simulations, hands-on activities, games, and cooperative group work.

Simulations. From simple ten-minute activities to in-depth lessons lasting a week or longer, the consistency of student engagement in active learning during classroom simulations leads me to conclude that simulations are one of the most motivating teaching methods available. When faced with the opportunity to apply what they have learned through simulations, it becomes necessary for students to interact with the content and with one other, assimilating new information and concepts with existing knowledge—often in situations that require them to prepare, then think on their feet. Without exception, all four participants claimed to have been actively involved in learning during every activity that incorporated this type of active learning. In most cases, simulations provide students with opportunities to experience a sense of independence while practicing higher level conceptual thinking in a safe environment. Among the virtually limitless possibilities of simulations, students can participate in mock debates, trials, or various activities that involve interpersonal activities and life skills.

There are clearly problems with this method, the most obvious one being time constraints. To develop appropriately, students need proper background information. Researching this background is likely to take more time than traditional methods. For

teachers, the implementation of simulations can become hectic, and takes immense patience. In addition, teachers' lack of familiarity with this method can be problematic as well. This might be addressed through staff development.

Hands-on activities. When the opportunity presents itself, students benefit from using their hands to learn. It incorporates the visual/spatial intelligences (Lazear, 1991) that many students possess. Not only is this strategy motivating, it helps students learn as well. Science is the most obvious class where students might be given the opportunity to work with their hands in lab conditions, but teachers from other content areas should also take note. Among a plethora of other possibilities, teachers can incorporate painting, drawing, sculpture, and map-making. When opportunities to use their hands are present, students are more likely to perceive a class as fun. The opposite is likely to be true as well. This overall contribution that frequent hands-on lessons have to students' feelings toward a class is notable.

Games. Using a game format that focuses upon fun as well as specific content is likely to yield positive results for most students. Games may stir the competitive juices of some students, but friendly competitions are not the only potentially successful method of game presentation. There is a plethora of computer software available and countless Internet web sites devoted to academic games. For whatever reason, interactive games are likely to engage most students in thought and learning. Gaming in the classroom might not only interest students in the current lesson, but I would argue that using games in a classroom can improve relationships between teacher and student, thus improving the classroom climate and a student's perception of the class.

Cooperative group work. The social aspect of group work can foster social constructivist learning and lead students into a more intense thought process. Content otherwise perceived as boring can become fodder for thought, discussion, application, and possibly debate. Students may seek help from others in a safe situation while offering their unique talents to the group. Teachers need to be careful with group work, though. Unsuccessful attempts to use this method may actually backfire and/or lead to some negative side effects.

Teachers should be keenly aware of their own motives and the rationale behind seemingly harmless methodological decisions. It appears that some students tend to do some profound thinking about the politics of classrooms. Their perceptions of why teachers behave as they do can lead to some insightful and possibly harmful conclusions. If teachers are not careful, students may become insulted actively disengaged if they perceive that their teachers do not trust their judgment. In this way, teaching methods are clearly linked to the relationship/respect feature of a classroom climate. Teachers need to be mindful of their overall goals, and carefully model the respectful manner they intend portray to their students.

Summary: Be careful of the difficulty. Just about any traditional lesson can potentially be converted to include one or more of these teaching methods. Regardless of the teaching method employed, middle school teachers interested in getting the most out of students should be cautious about making assignments too easy. Students should be challenged but certainly not overmatched either. It is sometimes difficult to tell where the fine line between the two of these is drawn, but teachers should carefully analyze their unique situation to get as close to that line as possible. One implied suggestion I gathered

from the findings was that students might feel compelled to understand content better when they are put in a position to apply and synthesize knowledge rather than simply memorize it.

Summary

Though many of the findings from this study are complex and often incorporate more than one motivational concept, the implications from this study can be summed up in several straightforward statements. First, there are no perfect motivational strategies—no perfect solutions to all motivational ills. Teachers looking for a panacea are likely to be disappointed. Readers are urged to remember that nothing is guaranteed—not even for the students who expressed their perceptions so vividly and freely throughout this paper. Temporary unpredictability of student interest and responses are subject to individual and transitory personal context that might counteract even the finest of lessons being conducted in the most ideal situations. Any number of factors might influence a student's personal agency, including a family problems, bickering with friends, a poor test grade, or a sick pet to name a few. These features were not examined in this study.

On the other hand, my participants enlightened me with some fundamentally down-to-earth implications for teachers looking to motivate students in school. Number one, follow the golden rule when dealing with their students. Teachers treating students with the profound respect they desire to see exhibited by the students are likely to see a difference. Number two, once a climate of respect is established, teachers should attempt to interest students through active and interactive activities that use various teaching methods with a focus on addressing age appropriate needs.

Final Thoughts

The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn. (Toffler, n.d.)

Adolescent students' perceptual worlds are mysterious places. Unbeknownst to many adults, there are some profound reflective thoughts stirring within these worlds on a recurring basis. One of the most important implications teachers can obtain from this study's findings is the revelation that everything is not always as it seems. Students do not need to come from poverty, broken homes, neglect, or abuse to develop a need for acceptance and psychological membership in school. Even some of the brightest, most promising students often experience psychological stress and are left feeling marginalized by thoughtless, inconsiderate, or even callous adult behavior. As teachers, our responsibilities go beyond transferring facts from "us to them." Like the vast majority of schools around the country, Broken Arrow Middle School claims that its mission is to prepare students to be independent learners and responsible world citizens by providing a rich and challenging curriculum in a safe, nurturing, and structured environment. In a nutshell, that is what my findings indicate teachers need to do.

REFERENCES

Allen, L., & Glickman, C. D. (in press). Restructuring and renewal capturing the power of democracy. International handbook of educational change. Hingham, MA: Kluwer Academic Publishers.

Allen, L., Rogers, D., Hensley, F., Glanton, M., & Livingston, M. (1999). A guide to renewing your school: Lessons from the League of Professional Schools. San Francisco: Jossey-Bass.

Armiger, M. (1996). Looking at block scheduling. NJEA Review, 10-14.

Bartlett, J. (1980). Bartlett's familiar quotations (15th ed., Beck, E.M., Ed.). Boston: Little, Brown and Company.

Beane, J. (1990). A middle school curriculum: From rhetoric to reality. Columbus, OH: National Middle School Association.

Belenky, M. F., Clinchy, B.M., Goldberger, N.R., & Tarule, J.M. (1997). Women's ways of knowing. New York: Basic Books.

Bloom, B., Englehart, M., Hill, W., Furst, E. & Krathwohl, D. (1956). Taxonomy of educational objectives: The classification of educational goals, handbook I: Cognitive domain. New York: Longmans, Green.

Brophy, J. E. (1982). Fostering student learning and motivation in the elementary school classroom (Occasional paper No. 51). East Lansing, MI: Institute for Research on Teaching. (ERIC Document Reproduction Service No. ED 216 008)

Burns, K. (1996). Four o'clock in the morning courage. In R. B. Toplin (Ed.), The Civil War: Historians respond (pp. 153-183). Oxford: Oxford University Press.

Canaan, J. (1987). A comparative analysis of American suburban middle class, middle school, and high school teenage cliques. In G. Spindler & L. Spindler (Eds.) Interpretive ethnography of education: At home and abroad (pp. 385-406). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. Review of Educational Research, 64, 363-423.

Cameron, J., & Pierce, W. D. (1996). The debate about rewards and intrinsic motivation: Protests and accusations do not alter the results. Review of Educational Research, 66, 39-51.

Clark, S. P. (n.d.) Anabelle's Quotation Guide. [on-line]. Available: http://www.annabelle.net/topics/author.php?firstname=Septima_Poinsette&lastname=Clark

Colsant, L.C. (1995). "Hey, man, why do we gotta take this...?": Learning to listen to students. In J. G. Nicholls & T. A. Thorkildsen (Eds.) Reasons for learning: Expanding the conversation on student-teacher collaboration (p. 62-89). New York: Teachers College.

Creswell, J.W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage Publications.

Csikszentmihalyi, M. (1975). Beyond boredom and anxiety. Washington: Jossey-Bass Publishers.

Csikszentmihalyi, M. (1978). Intrinsic rewards and emergent motivation. In M. R. Lepper and D. Greene (Eds.) The Hidden Costs of Reward: New Perspectives on the Psychology of Human Motivation. Pp. 205-216. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Culligan, J. (2000). What are middle school students' reasons for being or not being involved in their own learning? Unpublished manuscript.

Curtis, C. K., & Shaver, J. P. (1980). Slow learners and the study of contemporary problems. Social Education, 44, 302-309.

Day, H. I. (1982, May). Curiosity and the interested explorer. NSPI Journal, 21(4), 19-22.

Deci, E. L. (1975). Intrinsic motivation. New York: Plenum.

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.

Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. Journal of Personality and Social Psychology, 53, 1024-1037.

Delgado-Gaitan, C. (1996). Protean literacy: extending the discourse on empowerment. Washington, DC: Falmer Press.

Dewey, J. (1916). Democracy and education. [On-line]. Available: http://www.ilt.columbia.edu/projects/digitexts/dewey/d_e/contents.html

Dewey, J. (1933). How we think. New York: Houghton Mifflin.

Dweck, C. S. (1989). Motivation. In A. Lesgold & R. Glaser (Eds.), Foundations for a psychology of education (pp. 81-136). Hillsdale, NJ: Lawrence Erlbaum.

Eccles, J., & Midgley, C. (1989). Stage/environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Eds.), Research on motivation in education: Vol. 3, Goals and cognitions (139-186). New York: Academic Press.

Eccles, J. S., & Wigfield, A. (1997). Young adolescent development. In J. L. Irvin (Ed.), What current research says to the middle level practitioner. Columbus, OH: National Middle School Association.

Eccles, J. S., Wigfield, A., Midgley, C., Reuman, D., Mac Iver, D., & Feldlaufer, H. (1993). Negative effects of traditional middle schools on students' motivation. The Elementary School Journal, 93(5), 553-571.

Eggen, P., & Kauchak, D. (1994). Educational psychology: Classroom connections. New York: Macmillan College Publishing Company.

Fantuzzo, J. W., Rohrbeck, C. A., Hightower, A. D., & Work, W. C. (1991). Teacher's use and children's preferences of rewards in elementary school. Psychology in the Schools, 28, 175-181.

Farrell, J. A. (1982). Motivation and learning-It's as easy as riding a bike. NASSP Bulletin, 66, 5-8.

Fensel, M. L. (1990). The prediction of intrinsic motivation among early adolescents: A mediational model involving self-esteem and strain. Atlanta, GA: Paper presented at the Biennial Meeting of the Society for Research on Adolescence. (ERIC Document Reproduction Service No. ED 322 433)

Fosnot, C. T. (1994). Constructivism: A psychological theory of learning. In C. T. Fosnot (Ed.), Constructivism: Theory, perspectives, and practice (pp. 7-33). New York: Teachers College Press.

Fosnot, C. T. (1996). Constructivism: Theory, perspectives, and practice. New York: Teachers College Press.

Gibson, M. A. (1987). Punjabi immigrants in an American high school. In G. Spindler & L. Spindler (Eds.) Interpretive ethnography of education: At home and abroad (pp. 281-310). Hillsdale, NJ: Lawrence Erlbaum Associates.

Goodenow, C. (1991). The sense of belonging and its relationship to academic motivation among pre- and early adolescent students. Chicago: American Educational Research Association. (ERIC Document Reproduction Service No. ED 335 151).

Glasser, W. (1986). Control theory in the classroom. New York: Harper and Row.

Gottfried, A. E. (1983). Intrinsic motivation in young children. Young Children, 39(1), 64-73.

Goetz, J. P., & LeCompte, M. D. (1984). Ethnography and qualitative design in educational research. Orlando, FL: Academic Press.

Graham, S., & Weiner, B. (1996). Theories and principles of motivation. In D. C. Berliner and R. C. Calfee (Eds.), Handbook of educational psychology (pp. 63-84). New York: Macmillan.

Hackmann, D. G., & Schmitt, D. M. (1997). Strategies for teaching in a block-of-time schedule. NAASP Bulletin, 81, (588), 1-8.

Hahn, C. L. (1996). Investigating controversial issues at election time: Political socialization research. Social Education, 60(6), 348-50.

Harden, D. G. (1991). Taking advantage of murder and mayhem in social studies. The Social Studies, 82(4), 139-142.

Hootstein, E. W. (1993). Motivational strategies and beliefs of US history teachers at the middle school level. Journal of Social Studies Research, 16(2), 28-33.

Hootstein, E. W. (1994). Motivating middle school students to learn. Middle School Journal, 25(5), 31-34.

Hootstein, E. W. (1995). Motivational strategies of middle school social studies teachers. Social Education, 59(1), 23-26.

Horn, E. D. (1991). An argument for using intrinsic rather than extrinsic motivation, with specific suggestions for teachers. South Bend, IN. (ERIC Document Reproduction Service No. ED 355 036).

Hull, C. L. (1934). The concept of the habit-family hierarchy and maze learning: Part I. Psychological Review, 41, 33-54.

Keller, J. M., Kelly, E. F., & Dodge, B. J. (1978). A practitioner's guide to concepts and measures of motivation. Syracuse, NY: ERIC Clearinghouse on Information Resources. (ERIC Document Reproduction Service No. ED 169 953)

Keller, J. M. (1983). Development and use of the A.R.C.S. model of motivational design (Report from a series of lectures through Vaktroep Instruktiethnologie: University of Twente). Enschede, Netherlands. (ERIC Document Reproduction Service No. ED 313 001).

Knefelkamp, L. L. (1999). Introduction. In W. G. Perry, Forms of intellectual and ethical development in the college years: A scheme (Rev. ed., pp. ix-xv). San Francisco: Jossey-Bass Publishers.

Kohn, A. (1991a). Group grade grubbing versus cooperative learning. Educational Leadership (48)5, 83-87.

Kohn, A. (1991b). Don't spoil the promise of cooperative learning: Response to Slavin. Educational Leadership (48)5, 93-94.

Kohn, A. (1993a). Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes. Boston: Houghton Mifflin.

Kohn, A. (1993b). Rewards versus learning: A response to Paul Chance. Phi Delta Kappan, 74(10), 783-787.

Kohn, A. (1994). The risks of rewards. ERIC Digest. US Department of Education, The ERIC Clearinghouse on Assessment and Evaluation. (ERIC Document Reproduction Service No ED 376 990)

Kohn, A. (1996). By all available means: Cameron and Pierce's defense of extrinsic motivators. Review of Educational Research, 66(1), 1-4.

Kohn, A. (1997, September 3). Students don't 'work'-they learn. Education Week on the Web [online]. Available: <http://www.edweek.org/htbin/fastweb?getdoc+view4+ew1997+1365+5+wAAA+%26%28Students%26don%27t%26work%29%26AND%26%28Students%26don%27t%26work%29%3AKEYWORDS%26OR%26%28Students%26don%27t%26work%29>

Kopp, T. (1982). Designing boredom out of instruction. Performance and Instruction, 21(4), 23-27.

Kramp, M. K. (in press). Exploring life and experience through narrative inquiry. In K. deMarrais, & S. Lapan, (Eds.), Theory and methods in social research. Mahwah, NJ: Lawrence Erlbaum.

Ladson-Billings, G. (1994). The dreamkeepers: Successful teachers of African American children. San Francisco: Jossey-Bass.

Lazear, D. (1991). Seven ways of knowing: Teaching for multiple intelligences. Palatine, IL: Skylight Publishing.

Lepper, M. R., Keavney, M., & Drake, M. (1996). Intrinsic motivation and extrinsic rewards: A commentary on Cameron and Pierce's meta-analysis. Review of Educational Research, 66(1), 5-32.

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50, 370-396.

Merriam, S. B. (1988). Case study research in education. San Fransisco: Jossey-Bass.

Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco: Jossey-Bass.

Muth, K. D., & Alverman, D. E. (1999). Teaching and learning in the middle grades.

Needham Heights, MA: Allyn & Bacon.

National Middle School Association. (1986). Professional certification and preparation for the middle level: A position paper of national middle school association. Columbus, OH: Author.

National Middle School Association. (1995). This we believe, developmentally responsive middle level schools: A position paper of national middle school association. Columbus, OH: Author.

Nicholls, J. G., & Nolen, S. B. (1995). Big science, little teachers: Knowledge and motives concerning student motivation. In J. G. Nicholls & T. A. Thorkildsen (Eds.) Reasons for learning: Expanding the conversation on student-teacher collaboration (p. 5-20). New York: Teachers College.

Oldfather, P. (1991). Students' perceptions of their own reasons/purposes for being or not being involved in learning activities : A qualitative study of student motivation. Unpublished doctoral dissertation, Claremont Graduate University, Claremont, CA.

Oldfather, P. (1992). Sharing the ownership of knowing: A constructivist concept of motivation for literacy learning. Paper presented at the annual meeting of the National Reading Conference, San Antonio, Texas.

Oldfather, P. (1993). What students say about motivating experiences in a whole language classroom. Reading Teacher, 46, 672-681.

Oldfather, P., & Dahl, K. (1994). Toward a social constructivist reconceptualization of intrinsic motivation for literacy learning. Journal of Reading Behavior, 26(2), 139-158.

Oldfather, P., & Dahl, K. (1995). Toward a social constructivist reconceptualization of intrinsic motivation for literacy learning. (PR/AWARD NO.117A20007). Office of Educational Research and Improvement, United States Department of Education. Washington, DC.

Oldfather, P., & McLaughlin, H. J. (1993). Gaining and losing voice: A longitudinal study of students' continuing impulse to learn across elementary and middle level contexts. Research in Middle Level Education, 17, 1-25.

Oldfather, P., & Wigfield, A. (1996). Children's motivations for literacy learning. In L. Baker, P. Afflerbach, & D. Reinking (Eds.), Developing engaged readers in school and home communities. (pp. 89-113). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Pate, P. E., Homestead, E. R., & McGinnis, K. L. (1997). Making integrated curriculum work: Teachers, students, and the quest for coherent curriculum. New York: Teachers College Press.

Patton, M. Q. (1980). Qualitative evaluation methods. Newbury Park, CA: Sage.

Peach Star Education Services (Dystar Television). (1994). Georgia stories. Atlanta, GA: Georgia Public Broadcasting.

Pergande, K., & Thorkildsen, T. A. (1995). From teachers as experimental researchers to teaching as moral inquiry. In J. G. Nicholls & T. A. Thorkildsen (Eds.) Reasons for learning: Expanding the conversation on student-teacher collaboration (p. 21-35). New York: Teachers College.

Perry, W. G. (1999). Forms of intellectual and ethical development in the college years: A scheme (Rev. ed.). San Francisco: Jossey-Bass Publishers.

Piaget, J. (1967). Six psychological studies. New York: Random House.

Piaget, J. (1968). Genetic Epistemology, (Chapter 1) a series of lectures delivered by Piaget at Columbia University, (Eleanor Duckworth, Trans.). [on-line] Available: <http://www.marxists.org/reference/subject/philosophy/works/fr/piaget.htm>. New York: Columbia University Press.

Pierce, C. (1994). Importance of classroom climate for at-risk learners. Journal of Educational Research, 88(1), 37-42.

Rossman, G. B., & Rallis, S. F. (1998). Learning in the field: An introduction to qualitative research. Thousand Oaks, CA: Sage.

Ryan, R. M., Connell, J. P., & Deci, E. L. (1985). A motivational analysis of self-determination and self-regulation in education. In R. Ames & C. Ames (Eds.), Research on motivation in education, Volume 2: The classroom milieu (pp. 13-51). Orlando, FL: Academic Press.

Ryan, R. M., & Deci, E.L. (1996). When paradigms clash: Comments on Cameron and Pierce's claim that rewards do not undermine intrinsic motivation. Review of Educational Research, 66(1), 33-38.

Ryan, R. M., Hicks, L., & Midgley, C. (1997). Social goals, academic goals, and avoiding seeking help in the classroom. Journal of Early Adolescence, 17(2), 152-171.

Salvatterra, M., & Adams, D. C. (1996) Teacher perceptions of intensive time scheduling in four high schools. American Secondary Education, 24 (4), 23-29.

Scales, P. C. (1991). A portrait of young adolescents in the 1990s: Implications for promoting healthy growth and development. Minneapolis, MN: Search Institute/Center for Early Adolescence.

Schaps, E., & Lewis, C. (1991). Extrinsic rewards are education's past, not its future. Educational Leadership, 48(7), 81-87.

Scheurman, G. (1995, April). Constructivism, personal epistemology, and teacher education: toward a social-developmental model of adult reasoning. Paper presented at The Annual Meeting of the American Educational Research Association. San Francisco, CA. (ERIC Document Reproduction Service No. ED 394 947)

- Schug, M. C., Todd, R. J., & Beery, R. (1984). Why kids don't like social studies. Social Education, 48, 382-387.
- Skinner, B. F. (1950). Are theories of learning necessary? Psychological Review, 57, 193-216.
- Slavin, R. E. (1987). Developmental and motivational perspectives on cooperative learning: A reconciliation. Child Development, 58(5), 1161-1167.
- Slavin, R. E. (1991a). Synthesis of research of cooperative learning. Educational Leadership, 48(5), 71-82.
- Slavin, R. E. (1991b). Group rewards make group work work. Educational Leadership, 48(5), 89-91.
- Small, R. V., Dodge, B. J., & Jiang, X. (1996). Dimensions of interest and boredom in instructional situations. National Convention of the Association for Educational Communications and Technology. Indianapolis, IN. (ERIC Document Reproduction Resources Service No. ED 397 840)
- Stevenson, C. (1992). Teaching ten to fourteen year olds. White Plains, NY: Longman.
- Thornton, S. J. (1993). The quest for personal meaning: A personal account. In D. J. Flinders & G. E. Mills (Eds.) Theory and concepts in qualitative research: Perspectives from the field (p. 68-82). New York: Teachers College.
- Toffler, A. (n.d.) Brainy Quote [On-line]. Available: <http://www.brainyquote.com/quotes/quotes/a/q100088.html>
- Turner, J. C. (1995). The influence of classroom contexts on young children's motivation for literacy. Reading Research Quarterly, 30, 410-441.

Urdan, T., Midgley, C., & Wood, S. (1995). Special issues in reforming middle level schools. Journal of Early Adolescence, 5(1), 9-37.

Van Hoose, J. (1991). The ultimate goal: AA across the day. Midpoint, 2(1), 1-7.

Van Sickle, R. L. (1990). The personal relevance of the social studies. Social Education, 54, 23-27.

Van Sickle, R. L. (1992). Cooperative learning, properly implemented, works: Evidence from research in classrooms. In Stahl R. J. & Van Sickle, R. L. (Eds.), National Council for the Social Studies: Bulletin 87. Cooperative Learning in the Social Studies Classroom: An Introduction to Social Study. (pp. 16-19). Washington, DC: National Council for the Social Studies.

Van Sickle, R. L. (1996). Questions of motivation for achievement in social studies. In B. G. Massialas & R.F. Allen (Eds.), Crucial issues in teaching social studies (pp. 81-110). Washington, DC: Wadsworth.

Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1986). Thought and language. Cambridge, MA: MIT Press.

Webb, C. D., & Baird, J. H. (1980). Three strategies for motivating pupils. Clearinghouse, 54, 27-29.

Weiner, B (1986). An attributional theory of motivation and emotion. New York: Springer-Verlag.

Wells, M. C. (1996). Literacies lost: When students move from a progressive middle school to a traditional high school. New York: Teachers College Press.

Whitney, D. T. (2000). What happens when middle school teachers collaborate with a school technology coordinator to integrate computers into their classroom instruction? Unpublished doctoral dissertation, University of Georgia, Athens, GA.

Wigfield A., & Eccles J. (1994). Children's competence beliefs, achievement values, and general self-esteem: Change across elementary and middle school. Journal of Early Adolescence, 14(2), 107-138.

Wigfield, A., Eccles, J.S., & Pintrich P.R. (1996). Development between the ages of eleven and twenty-five. In Berliner, D.C. & R.C. Calfee (Eds.). Handbook of educational psychology (pp. 148-185). New York: Simon and Schuster MacMillan.

Williamson, R. D. (1996). Middle level education. In J. Sikula (Ed.), Handbook of research on teacher education (pp. 378-391). New York: Simon & Schuster Macmillan.

Willis, P. (1977). Learning to labor: How working class kids get working class jobs. New York: Columbia University.

Wolcott, H. F. (1994). Transforming qualitative data: Description, analysis, and interpretation. Thousand Oaks, CA: Sage.

Yin, R. K. (1994). Case study research: Design and methods, (2nd ed.). Thousand Oaks, CA: Sage.

APPENDIX A

BROKEN ARROW MIDDLE SCHOOL COVENANT

Broken Arrow Middle School Covenant

We collectively believe that students learn best when

- a) they are active in their own learning
- b) their lessons are connected to the real world
- c) their learning is connected across content areas
- d) meaning and understanding are sought
- e) parents are actively involved in their children's learning
- f) teachers embody most or all of the following:

genuine concern

encouragement

enthusiasm

patience

active involvement

openness

sense of humor

high expectations

fairness

APPENDIX B

INTERVIEW PROTOCOL #1

OVERVIEW OF STUDENT'S MOTIVATION TO ENGAGE

IN LEARNING ACTIVITIES

Interview #1: Overview of Student's Motivation to Engage in Learning Activities

Time:

Date:

Place:

Interviewer: John Culligan

Position of Interviewee: Student

Description of Project: Learn about what motivates student to engage in learning

- Tell me about a typical day at school last year (I will probe answers).
- Tell me about a typical day at school this year (I will probe answers).
- What are the main things you are trying to accomplish or learn at school?
- Tell me about the kind of assignment that brings out the best in you (and one that brings out the worst in you).
- Describe a few of your favorite lessons that you have ever participated in?
- How does a difficult lesson influence your effort? An easy lesson? Tell me about a specific lesson or assignment that you felt was too difficult. What did you do? Too easy?
- What will you use after you leave school that you are learning while you are in school?
- What else do you think is important for teachers to know about you?

NOTE--These are just the main "structural" questions to be addressed in this interview. They will be modified and expanded depending on the teachers' responses.

CLOSING STATEMENT: "Thank you for taking the time to meet with me. If you have any thoughts about what we have discussed during this interview, please see me."

APPENDIX C
QUESTION BANK

Question Bank

- How do you think others would describe you?
- Tell me about an extracurricular activity (sports, clubs, organizations, etc.) that you are involved in at Broken Arrow. How about outside of school?
- Tell me more about... (Fill in students' extracurricular activities)
- Why do you participate in...? (Fill in students' extracurricular activities)
- How well do you think others say you...? (Fill in students' extracurricular activities)
- How did you learn to...? (Fill in students' extracurricular activities)
- How did you feel about school last year?
- How do you feel about school this year?
- What are your parents' attitudes toward math? Science? Social Studies? Language Arts? Exploratory classes?
- What are your parents' attitudes toward grades?
- Please describe the subjects you currently take. I'm looking for information on favorite subject(s) this year and last year as well as least favorite(s) this year and last year.
- Tell me about your favorite way to learn.
- How do you feel about your...
- language arts class?
- math class?
- social studies class?
- science class?
- exploratory classes?

- How do you feel about your teachers?
- How do you think your teachers would describe you?
- How can you tell that your teachers care about you? Be specific.
- Do you try harder in some subjects than in others? If so, which ones? If not, why?
- During one of our earlier interviews, you stated (fill in earlier statement student made). Please tell me more about that.
- After reflecting upon our earlier conversations, what else can you share that might be important for teachers to know about your life at school?
- What is more important, grades or understanding the subject? Can you give an example or a story?
- What are your favorite kinds of lessons?
- Can you please describe how well you've done in school this year? Before this year.

APPENDIX D

GROUP INTERVIEW PROTOCOL

Group Interview: Brainstorming Ideas for Motivating Students

Time:

Date:

Place:

Interviewer: John Culligan

Position of Interviewees: Group of four students

Description of Project: Group brainstorming

- If you were an adult explaining the importance of learning to a young person (without parroting canned responses), what would you say?
- What suggestions do you have for teachers who wish to motivate their students?
- If you were a teacher, what kinds of lessons would you develop?
- What qualities of group work help students be productive? Unproductive?

NOTE--These are just the main “structural” questions to be addressed in this interview. They will be modified and expanded depending on the participants’ responses.

CLOSING STATEMENT: “Thank you for taking the time to meet with me. If you have any thoughts about what we have discussed during this interview, please see me.”