STUDENT PERCEPTIONS OF MOTIVATION AND THEIR IMPACT ON EFFORT
AND PERFORMANCE: A GROUNDED THEORY STUDY OF AFFECT AND
ACHIEVEMENT MOTIVATION

by

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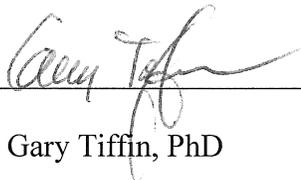   Patrick Allen, Ph.D.

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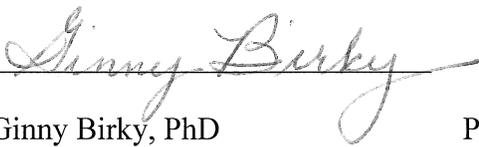
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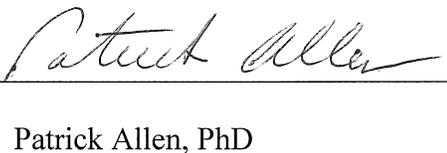
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Abstract

Motivation research is plentiful but applications of motivation in the academic environment remain sparse. This study examined student perceptions of motivation in relation to their effort and academic achievement. This research centered upon four research questions: 1) To what extent do student perceptions confirm extant motivation literature? 2) How do student perceptions of interest, effort, motivation, and achievement relate to one another? 3) How do affective states relate to studentsø perceptions of effort and performance? 4) To what degree can students self-identify motivating or demotivating factors?

Several findings emerged from this study. The most surprising was the connection between motivation and mental health with 50% of the female participants reporting mental health issues, despite the fact that this study was not designed to investigate aspects of mental health. Another finding that emerged was the participantsø near unanimous reporting that interest is tied to both effort and achievement, and that student choice is directly related to interest.

These findings led to the emergence of two theories of motivation among students. The first theory that emerged was Economy of Effort Theory which explains the discrepancy between the value that both the teacher and the student each place on an assigned task. The second theory that emerged was a Theory of Student Engagement which describes motivational factors in order to help teachers create engaging classroom environments.

Implications for this research include the importance for teachers to put theory into practice by constructing environments that enhance engagement in order to increase

student achievement. Implications for further research include investigating how mental health concerns inhibit student motivation as well as academic achievement. Additional research suggestions include investigating the affective domain to examine how to nurture students through a culture of care, as well as engineering opportunities for interest in the classroom to promote student engagement.

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Chapter 1: Introduction

As an experienced educator, I have seen students from all backgrounds achieve at various levels. I have witnessed students with few academic resources overcome great hurdles to meet their goals, and I have seen students with many resources perform poorly in school. Socio-economic status is often associated with achievement, but correlation does not imply causation. Throughout my experiences as a teacher and administrator, I have been plagued constantly by the question: õWhat factors drive students to achieve?ö as well as the reciprocal question, õWhat factors deter students from achieving?ö

Researchers who study academic motivation are very interested in learning about student achievement. The hundreds of thousands of students who drop out of high school each year represent the antithesis of achievement motivation because they are completely disengaged from school. This disengagement is sometimes referred to as *amotivation* (Deci & Ryan, 2002a). Understanding what factors lead to achievement motivation can help educators create motivational environments in schools that promote student achievement.

Since the early 1980s, a great deal of emphasis has been placed upon improving student achievement. In 1983 the National Commission on Excellence in Education published the report *A Nation at Risk*. The report condemned the condition of American schools calling them mediocre. At one point the authors of the report write that if õan unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of warö (United States. National Commission on Excellence in Education., 1983 p. 5).

A Nation at Risk prompted many educational reforms federal and otherwise. In 1989 United States governors assembled at an educational summit to discuss goals for the year 2000.

Arkansas governor Bill Clinton led the governors in drafting these goals which included defining targets for graduation rates, early childhood, adult literacy and reducing violence and substance abuse in schools (Ravitch, 2000). In 1994, after becoming president, Clinton enacted Goals 2000: Educate America Act. Eight years later in 2002, President Bush signed another educational law into effect in the form of the No Child Left Behind (NCLB) Act, a reauthorization of the Elementary and Secondary Education Act. Like Goals 2000 before it, NCLB incorporated educational standards and required more accountability from schools regarding student assessment.

As legislators enacted new policies during these early years of standardization, educational theorists and practitioners emerged to present instructional strategies that improved student performance. The instructional strategies included thinking strategies and executive skills. However, the emphases primarily addressed what students know but rarely focused on how much they care.

There are many examples of statewide and nationwide efforts to improve instruction in order to establish what students know and are able to do. One of the best examples is the Common Core State Standards. These standards are designed to õprovide a consistent, clear understanding of what students are expected to learnö (Common Core State Standards Initiative, 2012). While the Common Core State Standards center on aligning instruction, knowledge, and skills across the country, it addresses the ÷whatøof instruction but the method of instruction is still open for interpretation. While there may be a national emphasis on what students should know and be able to do, there is no national or state emphasis explaining how to motivate students.

There are also many models of instruction that emphasize how to teach what students should know and be able to do. Marzano and Danielson, two primary researcher-practitioners in the field of instruction and teacher evaluation, emphasize instruction and content. The state of Washington, for example, has implemented a new, statewide teacher evaluation system as a result of new legislation. Each school district may adopt one of three options: Marzano's evaluation model (Marzano, 2011), Danielson's evaluation model (Danielson, 2013), or the University of Washington's Center for Educational Leadership model. All of these models are widely used around the nation, including the University of Washington model which our district has adopted. While each of these instructional frameworks emphasizes explicit expectations for instruction, they provide little emphasis for engagement or motivation of the learner.

Danielson's Framework for Teaching consists of four domains of instruction, each of which includes as many as six criteria for effective instruction (Danielson, 2013). In all, 22 instructional criteria comprise Danielson's Framework for Teaching. However, of the 22 criteria, only two are related to the affective domain and not necessarily related to motivation or engagement of students. For example, criterion 2a addresses "creating an environment of respect and rapport" (Danielson, 2013). This criterion encompasses respect and fairness as opposed to goal orientations, motivation, or interest. Criterion 3c addresses "engaging students in learning" (Danielson, 2013), which involves enthusiasm, motivation, and interest, but does not consider *what* motivates students, or why they are engaged, enthused, or interested. Therefore, of Danielson's 22 criteria, only one criterion relates to student motivation.

Robert Marzano's Teacher Evaluation focuses on nine domains of instruction, comprised of 41 strategies of effective instruction (Marzano, 2011). Marzano's model features more than twice as many criteria for quality instruction as Danielson, and includes far more criteria for

engaging students. While not as broad as Danielson, some of Marzano's elements include a) celebrating success, b) noticing when students are not engaged, c) using academic games, d) demonstrating intensity and enthusiasm, and e) presenting unusual or intriguing information.

Although Marzano (2011) and Danielson (2013) recognize the importance of engaging students, they do not rely on the body of research that plumbs the nature of achievement motivation and how to capitalize on it in a broad instructional context. While each of Danielson's and Marzano's elements may be linked to research (albeit loosely in most contexts), a clearer connection to motivation research would serve them both well in terms of engaging students in the classroom environment.

Given the national climate for higher standards and accountability in education the prevailing emphasis on skills, content, and instruction is needed at a national level. It is the broadest attempt at a national curriculum established thus far in the history of the United States. While affect and motivation should not represent a majority of the emphasis on effective instruction, strategies to motivate students effectively should be given some kind of emphasis in order to better engage students in school. Without a focus on engagement, the term will remain synonymous with *on task*, *following directions*, or *active* when, in fact, the idea of motivation is much broader than that.

In my career as an educator, student motivation has become an increasingly important issue with every passing year. Rather than continue to read research literature regarding the nature of motivation (as I have done), I have concluded that it is time to ask the students about their perceptions of school and achievement, and analyze their responses to see if the researchers have missed one or more essential components that tie the domains of affect, motivation and

achievement together. This may lead to important discoveries about what drives students to achieve, or deters students from achieving in school.

Educators often speak of students in clichés. For example, õyou can lead a horse to water but you cannot make him drink.ö Another equally popular cliché suggests õwhere there is a will, there is a way.ö My concern has nothing to do with either of these, however, but quite the opposite. How does one make a student thirsty enough to achieve or to learn? If we turn the cliché around we acknowledge that where there is a *won't*, there is *no way*. My biggest concern in education is what to do with those who õwonøt.ö

Statement of the Problem

The purpose of this study is to determine to what extent students are self-aware of their own motivation and to what extent their awareness relates to their perceptions of effort and performance. Motivation is firmly rooted in affect because it relies on our values and desires to act toward a goal. This field is known in educational psychology as achievement motivation and focuses on what drives students to achieve. There are also other peripheral fields, however, that give attention to achievement-oriented behaviors. Each of these fields may shed light on aspects of student achievement motivation.

While achievement motivation stands alone as a field of educational psychology, it is informed by other fields in psychology and educational psychology. For the purposes of this study, there are five inter-related concepts I would like to draw upon to help explain student self-perceptions of school and achievement. The first of these is self-determination theory. Deci and Ryan (1985) established a framework for a motivational theory known as Self-Determination Theory (SDT). SDT attempts to explain õwhy we do what we doö (Deci & Flaste, 1995) and incorporates the basic human psychological needs of competence, autonomy, and relatedness.

The second field that affects achievement motivation is that of self-concepts. These self-concepts include the self-theories (Dweck, 1999a; Dweck & Grant, 2008; Dweck & Molden, 2005), self-efficacy (Pajares & Schunk, 2001; Schunk & Pajares, 2009), and self-regulation (Baumeister & Vohs, 2004, 2007; Vohs & Baumeister, 2011). These theories state that self-concept, ego, confidence, and similar constructs are at the root of motivation and, therefore, achievement.

The third field that affects achievement motivation is that of Achievement Goal Theory (AGT). AGT examines the nature of goals and why we pursue them (Elliot, 2005; Elliot & Dweck, 2005b). Goals are divided into mastery (intrinsic) and performance (extrinsic) goals and then further divided into approach and avoidance goals (the pursuit of a reward, or the avoidance of a punishment).

The fourth field is that of self-regulation and social cognitive theory. Self-regulation, also referred to as willpower, examines the degree to which we are internally or externally motivated to perform a task based upon the inherent value one perceives in the task (Deci & Ryan, 1985). Self-regulation research has revealed three motivational states of self-regulation: intrinsic motivation, extrinsic motivation, and amotivation, that is, failure to be motivated (Baumeister & Vohs, 2004; Deci & Ryan, 2002a). For example, a person may be intrinsically motivated to learn to play the guitar, with no external incentive to influence his or her behavior. On the other hand, a student may choose not to perform a task despite all attempts to extrinsically motivate the student, resulting in amotivated behavior.

The fifth field, and most critical to my study, is the field of interest and affect. Affect, moods, emotions, and self-worth all play a role in a student's ability to learn (Schunk, Pintrich,

& Meece, 2008). Interest is critical to intrinsic motivation, and has been shown to improve self-regulatory behavior among students and improve memory and learning (Tobias, 1994).

These five fields of self-determination theory, self-concepts, achievement goal theory, self-regulation, and interest and affect complement one another to inform the field of achievement motivation. Understanding the affective elements that promote or decrease student motivation and achievement may be critical to improving educational attainment in public education.

Research Questions:

The research questions generated for this study are rooted primarily in motivation. The secondary emphasis of the research questions involves affect, effort, and achievement in order to determine how studentsøperceptions of each of these four factors correlate with one another.

The research questions are as follows:

1. To what extent do student perceptions confirm extant motivation literature?
2. How do student perceptions of effort, motivation, and achievement relate to one another?
3. How do affective states (positive or negative) relate to studentsøperceptions of effort and performance?
4. To what degree can students self-identify motivating or demotivating factors?

Limitations and Delimitations

There are several limitations in this study. My sample, for example, consisted of only 18 participants due to the time constraints. Each interview lasted between 30 and 60 minutes in length. Had I interviewed more students, the study and the data analysis would have become much more extensive. My sample was also limited to middle school students in a single school, which does not provide a broad sample of students in a variety of settings. Therefore, I

recognize that the study may not be generalizable to broader populations, which is the nature of qualitative research anyway. Finally, another limitation was that this study depended on student interviews. There is a broad gap between the vocabulary and description used by university researchers and middle school students. As students described their experiences, one limitation was their abilities of self-reflection and self-expression. They described their thoughts, feelings and experiences as best middle level students can, which required a greater attention to detail on my part to code their responses and connect them to extant literature.

Delimitations are also numerous. The most obvious delimitations are the 30 minute time limit for all interviews. Deliberately limiting the interviews to 30 minutes was intended to honor the studentøs own time and patience as well as my own time so as to complete this dissertation on schedule. The other delimitation was the narrow scope established in this study. Ideally, I would have liked to interview students in urban, suburban and rural settings, as opposed to only the rural setting in which I conducted the study. Additionally, I would have also liked to interview many more students of varying ethnicity as opposed to predominately white students who comprise the majority of my school district and, therefore, my sample.

Definition of Key Terms

Achievement Goal Theory (AGT): An explanation of what drives people to pursue competence and evaluate oneøs own skill level. The two primary goals that comprise AGT are *performance goals* and *mastery goals* (Senko, Durik, & Harackiewicz, 2008).

Achievement Motivation: Characterized as *competence* motivation (Elliot & Dweck, 2005a) or õstriving for *competence*ö (Dweck & Molden, 2005, p. 122).

Affect: A term referring to both general moods and distinct emotions (Schunk et al., 2008).

Amotivation: Lacking any intention to act. Having no goal orientation (Deci & Ryan, 2002a).

Approach Goals: Pursing a reward or a desired outcome. Approach goals may fit both mastery and performance goal orientations, for example mastery approach goals (Wentzel & Wigfield, 2009).

Autonomy: The perception that a person is the source of one's own behavior (Deci & Ryan, 2002a).

Avoidance Goals: Avoiding a punishment or an undesired outcome. Avoidance goals may fit both mastery and performance goal orientations, for example performance avoidance goals (Wentzel & Wigfield, 2009).

Competence: Embodying the qualities of effectiveness, ability, skill, or success (Elliot & Dweck, 2005a).

Distal Goals: Long-range goals (Schunk et al., 2008).

Emotion: A specific, intense, and short-lived feeling (Schunk et al., 2008).

Grit: Perseverance and passion for long-term goals (Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R., 2007).

Interest: The liking and willful engagement in an activity (Schraw & Lehman, 2001.)

Mastery Goals: A collection of goals that focus on learning, mastering the task at hand, improving one's self, accomplishing something challenging for its own sake, or trying to gain understanding or insight (Schunk et al., 2008). Mastery goals are sometimes referred to as learning goals, task-involved goals, and task-focused goals.

Mood: A general feeling of longer duration that has no specific antecedent (Lewis, Haviland-Jones, & Barrett, 2008).

Performance Goals: A collection of goals that focus on demonstrating competence or ability and how ability may be judged relative to others. This includes attempting to perform better than

others, comparing oneself to others, avoiding of judgments of low ability or appearing stupid,

and seeking public recognition of high performance levels (Schunk et al., 2008). Performance

goals are sometimes referred to as ego-involved goals and ability-focused goals.

Personal Interest: A more stable personal disposition toward a specific topic or domain (Urdan &

Turner, 2005).

Proximal Goals: Short-range or ÷close-at-handø goals (Schunk et al., 2008).

Relatedness: Feeling connected to others, caring for and being cared for by those others, and

having a sense of belonging with other individuals and oneøs community (Deci & Ryan, 2002a)

(Deci & Ryan, 2002a) (Deci & Ryan, 2002b).

Self-Determination Theory: The belief that humans have three basic psychological needs in

order to achieve well-being: *autonomy*, *competence*, and *relatedness* (Deci & Ryan, 2002a; Vohs

& Baumeister, 2011; Wentzel & Wigfield, 2009).

Self-Efficacy: Oneøs perceived capabilities to learn or perform actions at designated levels

(Bandura, 1997).

Self-Reflection: The process through which people make sense of their experiences, explore their

own thoughts and beliefs, self-evaluate, and then change their thoughts or behavior in the future.

Self-reflection is a key factor in Banduraøs theories of *self-efficacy* and *social cognitive theory*

(Schunk & Pajares, 2005).

Self-Regulation: The processes by which the self alters its own responses or inner states in a

goal directed manner (Vohs & Baumeister, 2011).

Self-Theories: Oneøs beliefs about the degree to which his or her own abilities are fixed or

malleable. These abilities may include such characteristics as intelligence, affective traits, skills,

or athletic prowess (Dweck & Molden, 2005; Lewis et al., 2008).

<u>Situational Interest:</u> A more temporary, situation specific attention to a topic (Urdan & Turner, 2005).

<u>Social Cognitive Theory (SCT):</u> Also known as social cognition, SCT is comprised of several elements that define uniquely human abilities including planning and forethought, learn through vicarious experience such as modeling or mirroring, *self-regulate* and *self-reflect* (Schunk & Pajares, 2009).

Chapter 2: Literature Review

Introduction

õIf the human brain were so simple that we could understand it, we would be so simple that we couldnøtö (Pugh, 1977, p. 154). Whether understanding the mind, or the forces that drive it, neither is an easy task. However, that does not mean we cannot come to better understand the mind or our motivations through inquiry. I have often wondered what compels one student to pick up a pencil and press on through a boring task to achieve a goal, or what compels another to do quite the opposite and sit idly by.

Researchers in the field of achievement motivation are interested in these same questions. Achievement motivation is more specific than the broader field of motivation in that it involves the nature of achievement or, as some researchers define it, õstriving for *competence*ö (Dweck & Molden, 2005, p. 122). Given the aforementioned students, what drives the former student to strive for competence, while the latter avoids it? Of course, there are a variety of reasons and other phenomenon at work. For example, the reasons why anyone does anything are inherent in an individualøs values, interests, goals, expected outcomes, beliefs of self and oneøs abilities, social perceptions and many other factors.

For the purposes of this study, however, I have chosen to focus on five perspectives from motivation research that explain factors of student motivation. These five fields of self-determination theory, self-concepts, achievement goal theory, self-regulation, and interest and affect complement one another to inform the field of achievement motivation.

Self-Determination Theory

SDT is perhaps the most comprehensive and empirically supported among the theories of motivation today (Schunk et al., 2008). It was developed to explain the process of utilizing or

exerting one's will. SDT was discovered to address three basic human psychological needs: competence, autonomy, and relatedness. To begin with, *competence* is the perceived ability to be successful at a given task or circumstance. Competence answers the question, "Can I do it, or not?" On a related note, Dweck and Molden sum up the entire field of achievement motivation as a "striving for competence" (2005, p. 122).

The second basic human psychological need according to SDT is *autonomy*. Autonomy is the belief that an individual is responsible for his or her own behavior, which stems intrinsically from the self as opposed to extrinsically. More specifically, it is perception that a person is the source of his or her own behavior (Deci & Ryan, 2002a).

The third and final basic psychological need is that of *relatedness*. Ryan and Deci (2002a) posit that all individuals possess an innate need for social connectedness. Relatedness is the sense of belonging to a group – to care for, and to be cared for, by others in the same group. When these three basic psychological needs are met, a person can be self-determined, that is, motivated to act of his or her own volition.

SDT is further divided by degrees of autonomy. The impetus for motivation determines the form of motivation and SDT examines three forms: intrinsic motivation, extrinsic motivation, and amotivation. Intrinsic is the most desirable because the impetus to act comes from within and is, therefore, autonomous. Extrinsic motivation, on the other hand, is divided into four types of regulation, ranking from least to most autonomous: external regulation, introjected regulation, identified regulation, and integrated regulation. These types of regulation involve varying degrees of acceptance of one's involvement in the task – from satisfying an external demand to pursuing something that is aligned with one's personal goals, but not inherently interesting or enjoyable (Deci & Ryan, 2002a).

The first type of extrinsic motivation is that of *external regulation* (Vallerand & Ratelle, 2002). External regulation is the least autonomous of the kinds of extrinsic motivation as it relies on pursuing a reward or avoiding a punishment. The next type of extrinsic motivation is *introjected regulation*, which is the first stage of internalization of the task. The task is still done out of obligation, but one's involvement is internalized and therefore acts to avoid shame or internal pressure.

The third type of extrinsic motivation is known as *identified regulation*. This form of regulation occurs when an individual identifies a value in the task and, therefore, commits to the task to achieve a personal value. *Integrated regulation* is the fourth and final type of extrinsic motivation. It is most autonomous in nature and therefore most like intrinsic motivation (Ryan & Deci, 2002). Integrated regulation occurs when the values of a task or its outcome are aligned with the values and beliefs of the individual performing the task. Although it is highly autonomous, it is distinct from intrinsic motivation because the task is still not accomplished for the sake of the task (interesting or enjoyable on its own merit) but because the outcome will contribute to a positive personal experience or goal.

The third and final form of motivation is amotivation, where there is no desire to pursue a reward, avoid a punishment, or otherwise act in one's own interest (Deci & Ryan, 2002b). Amotivation has been compared to learned helplessness since people who exhibit amotivational behavior often believe they have no control over their competence or autonomy in a given task, or fail to find value in the task (Vallerand & Ratelle, 2002). Perhaps the most frequent display of this behavior is in the form of the decision to drop out of school. For an amotivated student, the most probable course of action is to quit the task for which they are amotivated.

Self-determination theory is a significant element in the field of motivation. As a result, it contributes heavily to the more specific field of achievement motivation. Nonetheless, it is not the only contributor. Extrinsic motivation relies heavily on different forms of regulation for different purposes, and as a result it is also important to understand self-regulation. Therefore, to understand Achievement Motivation is to understand self-concepts including self-regulation.

Self-Regulated Learning and Social Cognitive Theory

Self-theories include several different, yet similar components. To begin with, self-efficacy addresses the learnerøs beliefs about how he or she may perform on a given task. Self-efficacy then leads to self-regulation, or how students conduct themselves in a task based on how they feel about it. Self-regulation relates to an individualøs management of his or her own executive functions (Pomerantz & Shim, 2008), is often synonymous with self-control or willpower, and is divided into three components. The forethought phase involves self-regulatory beliefs and processes and prepares individuals for learning (Ramdass & Zimmerman, 2009). The performance phase involves regulatory processes such as the implementation of learning or study strategies and the studentøs monitoring of metacognition or performance accuracy (Ramdass & Zimmerman, 2009; Zimmerman, 1998).

The third and final stage of self-regulated learning is self-reflection. In this stage learners evaluate their performance and adjust strategies as needed for future opportunities for learning (Ramdass & Zimmerman, 2009; Zimmerman, 1998). This process of self-evaluation is defined by Ramdass and Zimmerman (2009, p.21) as õí a key self-regulatory process that involves setting and using standards to judge the quality of oneøs performance.ö Research has also attributed self-evaluation to increased student performance (Kitsantas, Reiser, & Doster, 2004; Kitsantas & Zimmerman, 2009).

Self-Theories

Self-theories refer to implicit theories of intelligence. Implicit theories of intelligence place theorists in one of two groups. Entity theorists are those who believe that intelligence is finite, that it is a trait inherent since birth and we have a limited capacity for intelligence (Baird, Scott, Dearing, & Hamill, 2009; Dweck, 1999b). People in this camp believe one is smart or one is not. Incremental theorists, on the other hand, believe that intelligence is malleable and that people can learn to grow more intelligent through effort and experience (Baird et al., 2009; Dweck, 1999b).

The significance of this topic is to illustrate that a learner's performance is influenced by more than mere cognition. Each learner must perceive that they can accomplish the task (self-efficacy), that they know how to set about accomplishing it (self-regulation), and that their implicit beliefs about themselves can foster growth (incremental theory) as opposed to reinforcing doubts about themselves (entity theory) (Blackwell, Trzesniewski, & Dweck, 2007). Two separate studies by Blackwell et al. (2007) positively associated incremental theory of intelligence with positive beliefs about effort, learning goals, and low helpless attributions, and improved grades in a mathematics curriculum. Furthermore, all of these factors were significantly correlated and õformed a network of interrelated variablesö (Blackwell et al., p. 250).

Achievement Goal Theory

Achievement Goal Theory (AGT) identifies two goal orientations that predict academic achievement (Senko et al., 2008). Mastery goal orientations focus on developing one's own ability, so success or failure is defined using self-referential standards. Performance goal orientations involve ability validation by outperforming peers, so success or failure is defined

using normative criteria. Elliot (1999) recognized that performance goals predicted achievement to a great degree but not completely. He further divided performance goal orientations into two separate categories (approach and avoidance) in order to account for approach predictors of achievement.

Dweck and Molden (2005, p. 122) refer to achievement motivation as õstriving for competence.ö In this light, performance goals are socially motivated as they rely on competence validation. Approach goals focus on pursuing a goal, whereas avoidance goals attempt to avoid negative consequences such as punishment, ridicule, pain, or similar undesired outcomes. In the case of performance approach goals, students are trying to outperform others. In the case of performance avoidance goals, students are trying to not do worse than everyone else does. Compare both of these to mastery goals, which Dweck and Molden refer to as competence acquisition, in which students simply wish to learn as much as they can about a subject. Dweck (1999a, p. 15) refers to the difference between performance and mastery goals as ‑looking smart, versus learning.ø Learning needs no social context, whereas looking smart does, hence the difference between competence acquisition and validation.

Achievement Goal Theory also correlates to implicit theories of intelligence in that entity theorists share many traits with performance goal learners (Baird, et al., 2009; Dweck, 1999). If such a learner receives a negative validation about their goals, they may perceive they are unintelligent, and develop a helpless learning response, similar to learned helplessness. Incremental theorists, on the other hand, share much in common with mastery goal learners as they wish to learn as much as possible about their interests, and do not see learning as finite. These learners thereby avoid the helpless learning response, and exhibit a mastery learning response (Baird, et al., 2009). Furthermore, research in incremental theory has shown that it can

both increase student achievement (Aronson, Fried, & Good, 2002; Good, Aronson, & Inzlicht, 2003) and decrease stereotype threat among students (Aronson, et al., 2002).

Both mastery and performance goals are uncorrelated and are therefore independent, as opposed to opposite, of one another. An individual may choose one or the other, both or neither goal orientation (Ames & Archer, 1988; Miller, Behrens, & Greene, 1993; Nicholls, Cheung, Lauer, & Patashnick, 1989).

Historically, mastery goals were more prized in the literature because of their direct correlation to interest and intrinsic motivation, which was believed to be indicative of achievement (Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000). While mastery goal orientations do, in fact, predict interest, recent research has shown that they do not predict achievement for two reasons (Senko et al., 2008). The first reason is the *achievement measure* explanation (Scouller, 1998). The achievement measure explanation addresses the concern that common classroom assessments may not assess the ‑deep learningø of mastery learners. Since mastery learning is highly correlated to interest, mastery learners are more likely to use ‑deep learningø strategies such as elaborating, connecting to other topics, and making coursework relevant to their interests (Elliot, McGregor, & Gable, 1999; Harackiewicz et al., 2000; Nolen, 1996; Wolters, 2004). Mastery learners are also known to be better self-regulators, able to successfully monitor their own understanding, persist longer when faced with obstacles, and seek help when confused (Garcia & Pintrich, 1991; Pintrich, 2000; Wolters, 2004; Wolters, Yu, & Pintrich, 1996). This ‑deep learningø is not often assessed in coursework as the course assessments may only survey understanding and not measure depth of the learning.

The other reason that mastery goal orientation may not predict achievement is due to the *tangential study* explanation (Senko & Miles, 2008). Tangential study occurs when the learner

discovers an interesting topic and independently pursues that topic, often at the expense of other course concepts. While mastery goal orientations may not predict achievement, performance goal orientations do predict achievement exceedingly well, especially performance approach goals.

Interest and Affect

Various researchers have defined interest differently. Each uses an operational definition that best defines his or her own research questions, but they differ only slightly. Schraw (2001) and Lehman define interest as liking and willful engagement in an activity. Rigby, Deci, Patrick, and Ryan (1992) define interest as an attempt to master one's environment as well as a willingness to approach novel stimuli and challenges. Similarly, Harackiewicz and Elliot defined it as deriving from the opportunity it provides to master or control one's environment (1993). These definitions overlap when describing interest as willful interaction with one's environment.

Interest is not motivation but it has an effect on motivation, particularly intrinsic motivation as it leads the individual to willfully engage in an activity. The first four achievement motivation theories mentioned prior to this section all deal primarily in the cognitive domain as they deal with goal orientations, self-reflection, exertion of effort and other cognitive demands. But researchers are increasingly devoting more attention to the importance of interest, emotion and affect in learning (Schunk et al., 2008).

While most people are familiar with the concept of interest, it has only been recently that interest has been divided into at least two facets. Among them are personal, also known as individual interest, and situational interest. Personal interest is characterized as that which an individual brings to an environment or context (Mitchell, 1993). It is slow to develop yet long-

lasting. While existing research may have determined factors that are influenced by interest (cognitive functioning, for example, is significantly influenced by interest), not much research has revealed the factors that develop interest.

One factor that seems to have a strong effect on interest is that of personalization (Cordova & Lepper, 1996). In fact, personalization, and therefore interest, has a significant effect on motivation and learning as well. According to Cordova and Lepper, greater personalization leads to greater motivation and minimal personalization results in minimal motivation. Likewise, personalization of an activity in terms of themes, objects, and characters of high prior interest should increase intrinsic motivation. In addition, topics are better learned and remembered when presented in connection with topics or ideas of high interest value. Researchers have sought to stimulate student interest by presenting educational materials in more meaningful contexts that illustrate the utility of learning or make it more personally relevant (Hidi & Harackiewicz, 2000). This personal relevance has led students to pay closer attention to content, persist longer when facing difficulties, enjoy their experiences more, and ultimately learn more.

The other form of interest relevant to this analysis is that of situational interest. While personal interest is defined as a prior interest one brings to an environment or context, situational interest is defined as an interest that one acquires by participating in an environment or context (Mitchell, 1993). Situational interest is generated by certain conditions or stimuli in the environment that focus attention and represents a more immediate affective reaction that may or may not last. In contrast to personalized interest, situational interest quickly develops and quickly fades. The key here, then, is to engage the learner before situational interest fades, in

order to leave them with a lasting impression. This tendency for situational interest to fade quickly is only part of a broader concept.

Hidi and Baird (1988) dichotomized situational interest into two subcategories: that of ―catch‖ and that of ―hold.‖ Catch factors are those that trigger, or stimulate, an individual‘s interest, while hold factors are those that maintain interest over time. Mitchell (1993) identified certain catch factors in his study of interest in the mathematics classroom, including games, group work, puzzles and computers. Among the hold factors Mitchell categorized the less tangible concepts of meaningfulness (also known as personal relevance) and involvement. This distinction between catch and hold techniques is an important one for educators to recognize. Emphasis on catch techniques with little or no emphasis on hold techniques can fail to enhance intrinsic interest. According to Mitchell, certain topics can be made more interesting, but if one is not careful the enhanced interest will have little or nothing to do with the content being taught. Dewey (1913, p. 158) writes of a similar notion saying, “appeal is simply made to the child‘s love of something else.”

If done correctly, however, creating environments rich in situational interest is one way for schools to motivate students and help them make cognitive gains in areas that initially hold little interest for them (Hidi & Harackiewicz, 2000). However, anyone who has ever been in a traditional secondary classroom will quickly realize the difficulty of personalization. Most secondary schools, especially large high schools, are not in any way equipped to handle a large scale personalization of content for each student. A few reform designs have been based upon this concept, but they remain small. The Big Picture Company and the Coalition of Essential Schools, for example, have made great strides in personalizing curriculum for students, but it still remains a dream for most secondary schools, and even elementary schools for that matter.

Regardless of the challenge, situational interest is, perhaps, one of the best opportunities facing educators today. Situational interest may provide an effective alternative for teachers who wish to optimize interest in their classrooms. By focusing on potential for situational interest inherent in the content and mode of presentation (such as role play or simulation, discovery play, problem solving), teachers may be able to promote learning for all students, regardless of interest. Interests, then, will develop as the environment is tailored to maximize situational interest. Ultimately, creating situational interest may enhance individual interest in some students, and effective classrooms may also promote the development of intrinsic motivation.

One would hope that a classroom high in situational interest would change an individual's interest level regarding the subject over time (Mitchell, 1993). Whereas a teacher may have no control over a student's personal interest coming into a course, the same teacher may have a noticeable influence on the student's outgoing personal interest by the end of the course. Enhancing classroom interest may offer the most direct way to improve the condition of low student interest. Flow researcher Csikszentmihalyi states, "if intrigued by the opportunities of the domain, most students will make sure to develop the skills they need to operate within it" (1990, p. 126).

While situational interest has the potential to offer a great deal to the curriculum, there are some concerns as well. For example, creating environments that are rich in novelty, group work, and the use of technology, are highly engaging but can take extra time for teachers to plan and may be difficult environments for some instructors to manage. Mitchell comments on the lack of research surrounding situational interest and promoting situational interest in educational interventions. He also adds that it is essential to identify the factors that determine whether situational interest triggered in a situation can be maintained over time (Mitchell, 1993).

Conclusion

Because I have chosen to undertake a grounded theory study, it is typical for the literature review to be rather small or even non-existent as the researcher attempts to enter the field with an open mind, as opposed to an empty head (Dey, 1999), and construct new theory without preconceived notions of the literature. It is not, however, always possible to get a proposal approved without a literature review. Therefore, this review is on the more modest side so that I can leave myself open to the possibilities of new directions, data, and developments.

While the fields of self-determination theory, self-theories, self-regulation, achievement goal theory, and interest are varied in their own right, they are all related to the concept of student achievement. In fact, there are so many factors that affect student achievement, it may sound ludicrous to even attempt to develop a collection in a single literature review, or consider them all in a single study. All of these fields, however, are related to one another in that they are rooted in the self and one's goals. If educators today had a greater understanding of motivation, then they could further reduce factors that impede achievement and increase factors that promote it, thereby helping students reach their full potential.

Chapter 3: Methodology

Introduction

Understanding what motivates anyone to do anything is a passion of mine. Since my first year teaching, I have been curious about the human mind, the interplay of our affect and cognition and what motivates us to do what we do. I also understand that the field of achievement motivation is abundant with research, and I have wondered how I could possibly add to the body of research in this field. It soon occurred to me, in the midst of my own investigation of the literature, that much of the research in achievement motivation had been done using quantitative methods. I cannot recall a single study in which the researcher sat down and had a conversation with a participant to understand what motivated that individual.

For the purposes of this study I chose to use a grounded theory methodology. Of all of the qualitative methods, grounded theory allows the opportunity to investigate a population around a particular theme, see what emerges, and induct new theory based upon the emerging data. More specifically grounded theory allows the researcher to investigate õí the underlying processes of what is going on, so that professionals can intervene with confidence to help resolve the participantøs main concernsö (Glaser, 1998, p. 5). While there is a great deal of data on the nature of motivation, effort, and achievement, I know of no study that situates these themes in the context of interviewing middle school students in a grounded theory method in order to determine how they perceive their own interest, motivation, effort, and performance and how these themes relate to one another based upon their perceptions.

Although I have a fairly strong understanding of both achievement motivation and schools and students, I do not know what lurks beneath the surface, and therefore, what patterns and connections may emerge to shed light on the juxtaposition of these ideas. I also appreciated

the grounded theory concept that õall is dataö (a timely newspaper headline, a conversation with

a friend, an unrelated research study that triggers an epiphany in light of the study) as well as the

conditional matrix that develops after the coding process that helps to explain the broader

concepts that emerge during the study.

Setting/Role of the Researcher

The setting of the study was the communities of the Long Beach peninsula served by the

Ocean Beach School District. District enrollment is nearly 900, with the population of the

middle school being approximately 140 students. Roughly 60 percent of the districtøs students

receive free and reduced lunch because the community is economically depressed. The economy

of the peninsula relies primarily on the seasonal tourism industry because the formerly lucrative

industries of fishing and logging have died away almost completely. The three largest employers

in the county are now the county government, the school district, and the local hospital.

In addition to being the researcher of this study, the participants also know me as their

middle school principal. My role as principal made access to students and parents convenient,

and also allowed them easy access to me in the event there were any questions. Sometimes there

can be a negative connotation to school principal where students are concerned, but we have a

small school and I know each student well. As a result, no students invited to the study were

reluctant to participate.

Participants and Sampling Strategy

I interviewed 18 students for my study, ages 13 to 15 and ranging between seventh grade

and ninth grade. I aimed to select students who represented the spectrum of achievement

(ranging from straight As to nearly all failing classes) and who represented the spectrum of effort

(students who teachers identified as determined and those who were not). From a list of

approximately 25 names, I then approached each student individually and invited them to the study with instructions to take home a note for their parents to read and sign their approval. I purposively sampled only participants who received parent permission. The group of students comprised a blend of ten boys and eight girls representing all levels of academic achievement and effort. Students in the study were predominantly white (16 out of 18) because our school's population is nearly 90% white, with the other 10% being Hispanic. All participants were from the Long Beach peninsula in southwest Washington, and they are all served by the Ocean Beach School District in which the survey was conducted.

Procedures

When the signed letters of consent began trickling in, I began conducting interviews. I arranged times to interview students beforehand based upon the student's class schedule, and they met me in my office. At the beginning of each interview I reminded each student that the interview was confidential and that they could opt out at any time. Then I instructed the student that the interview would be recorded so that I could later transcribe it, and I recorded it using a microphone connected to my desktop computer. I used the program Audacity to record the interviews, saved them as .mp3 files and later transcribed them. During the interview I took notes about the themes that began to emerge. I also used the interview questions with fidelity, although I found many questions to be redundant as students often answered more than one at a time. Each interview took between 30 and 45 minutes depending upon the extent to which students responded. The end result of the interviews was approximately 600 pages of interview transcription that I then coded for themes.

Research Ethics

In the Letter of Consent (Appendix A) I stated the level of risk (low), assurances related to the confidentiality and security of all of the material, the benefits of the study, the use of pseudonyms to assure confidentiality upon publishing the study, and the right of participants to voluntarily withdraw from the study at any time.

The ages of my participants represented a somewhat difficult situation in that an extra level of consent was required: the parents needed to consent to the study in addition to obtaining consent from the students. The superintendent of the district and the board of directors reviewed and approved the study after an IRB approval was received from George Fox University.

Research Design and Data Collection Methods

Open coding and constant comparison.

Upon interviewing students, I began the process of open coding and constant comparison with my data. One of the features of a grounded theory methodology is the simultaneous collection and analysis of data (Charmaz, 2006). As students responded to the interview questions, I took notes in my field journal using key words and incorporated verbatim audio transcription afterward. My field journal consisted of two sections on each page so that there was room for key word notes from the interview and a section immediately adjacent to open code after the interview. I also used note cards to memo ideas and connections as they occurred.

After each interview, I began the process of open coding in the margin, as well as reflective journaling or memoing at the bottom of each page. Each new interview was compared to those prior, and coded and memoed accordingly.

Axial and selective coding.

Once I conducted a few interviews, I began the process of axial coding by looking for patterns in the data. These patterns grouped concrete codes from the open coding process into groups or families of concepts that begin to point at emerging themes. As I collected data, took notes and memos, and continued open coding, I resumed axial coding as additional patterns and concepts emerged via a method of constant comparison.

Finally, I selectively coded the notes from the axial process in order to establish theoretical frameworks based upon the relationships discovered. After interviewing the 18th participant, I reached a theoretical saturation in which I felt no new information could emerged to advance the research. At this point, I concluded the data collection phase.

Generating new theory.

Upon concluding the data collection phase, I began sorting memos in a structure that explained the emerging phenomenon. After a clear and recognizable theory emerged, I revisited the literature with respect to the selective codes and sorted memos explaining the theory. Then, with regard to the selective codes, sorted memos and the revisited literature, I formally wrote up the theories that emerged: a) a theory of an economy of effort, and b) a theory of student engagement.

Potential benefits of the research.

There is already a great deal of literature about achievement motivation; however, I was not aware of any that emanated from the student perspective. Therefore, I hoped to examine these concepts to see if students spoke to the same ideas that are present in the literature and, if so, how they defined these for themselves. In addition, I also looked to see if themes emerged that were not in the literature.

Ultimately, given my passion for student affect, motivation, effort, and achievement, I hoped to generate new theory that would help teachers, parents, and students understand roadblocks to student achievement. Having developed two such theories, I wish to move theory into practice by creating very simple tools or structures for students, parents, and educators in order to identify causes for motivational concern in schools, and to help students overcome these concerns in order to improve student achievement. In essence, my hope is to create broader awareness of the role that affect plays in student achievement.

Chapter 4: Research Findings

Statement of the Problem

The purpose of my study was to determine to what extent students (ages 13-15 from a rural school district in southwest Washington) were self-aware of their own motivation and to what extent their awareness related to their perceptions of effort and performance in school. I have drawn upon five different fields that attempt to explain motivation and goal behaviors: Self-Determination Theory, self-concepts, Achievement Goal Theory, and self-regulation, and interest and affect.

The research questions generated for this study were rooted primarily in motivation. The secondary emphasis of the research questions involved interest, affect, effort, and achievement in order to determine how studentsøperceptions of each of these four factors correlate with one another. The research questions are as follows:

1. To what extent do student perceptions confirm extant motivation literature?

2. How do student perceptions of interest, effort, motivation and achievement relate to one another?

3. How do affective states (positive or negative) relate to studentsøperceptions of effort and performance?

4. To what degree can students self-identify motivating or demotivating factors?

This chapter is organized according to the four research questions of the study, with headings and sub headings relating to topics within each research question. As some research themes span one or more research question, redundancy will be acknowledged within each research section. Surprises in the findings as well as new theory will be addressed at the end of

the chapter. Also, all names in this chapter are pseudonyms to maintain the confidentiality of the actual student participants.

Participants:

I interviewed 18 students consisting of ten boys and eight girls. I am listing the names of these students here in order to formally introduce each participant. Each name is a pseudonym of the actual participant in order to maintain the confidentiality of each participant. The students were as follows:

Table 1: Pseudonyms of student participants

Girls	Boys
	Andres
Alex	Arturo
Ashley	James
Beth	Josh
Emily	Kevin
Helen	Nick
Iona	Nolan
Katherine	Patrick
Phoebe	Scott
	Trevor

Findings:

Research Question #1: To what extent do student perceptions confirm extant motivation

literature?

Part of this study was to determine how students self-identified extant research in their

own terms. The goal in this case was not to prove or confirm extant literature, but to find out

how students describe existing research in their own words. Sometimes the nature of research is

surprising when it explains the opposite of what we had thought was true. But oftentimes

research also confirms commonly held beliefs. In the case of students reporting their own

perceptions of effort, interest, affect, and performance, it is good to know that their perceptions

align with research findings. What I found important, however, was exactly how students

described these perceptions, in order to find common or lay terms for research concepts. For

example, I wouldn't expect a student to say that he likes a class because the work is ―autotelic.‖

But when Scott described autotelic traits in a class by saying that ―a hands on project motivates

me and gives me a chance to see if I did it right or wrong, without anyone telling me. I can just

tell,‖ the research is confirmed in the student's language. Confirming this research is helpful

when talking to students who don't have the depth of experience in reporting research terms.

Therefore, aligning research terms to lay terms helps identify traits we want to encourage or

discourage in schools.

The findings that most confirmed extant research were a) interest (and the absence of

interest: boredom) as a function of effort, b) goals as a function of effort, and c) choice, or

autonomy, as a function of interest. These will be explained in *Section 2: How do student*

perception of effort, motivation and achievement relate to one another?

In addition, students confirmed various functions of situational interest (Mitchell, 1993). Situational interest occurs when a task or environment is constructed that appeals to factors that interest students in general, but doesnøt necessarily apply to their own personal interests. Success with situational interest can also lead to new personal interests so long as activities employ ÷catch techniquesøto catch studentsøattention, and ¬hold techniquesøthat hold student attention over time (Mitchell, 1993). Students in this study self-reported these same factors: that they are interested in an activity when they can use technology, work in groups, incorporate games, or when teachers use humor (all ÷catch techniquesø) and remain interested in an activity when it is meaningful, career-oriented, or relevant to their interests (all ¬hold techniquesø).

Rresearch Question #2: How do student perceptions of interest, effort, motivation and achievement relate to one another?

Students self-identified more with topics related to interest than all other categories combined. Topics of interest related to boredom, engagement, intrinsic and extrinsic interest, as well as relationships with teachers (both good and bad).

Interest.

All students surveyed indicated that interest is critical when learning. Students reported that they exert more effort when interested, stay on task longer, and are likely to do better on assessments. Students described many different factors of being interested including group discussion and social elements of instructions (such as working with peers and/or friends in pairs, small groups), being autonomous or the ability to make choices with regard to instruction, and relevant work like career oriented topics and topics related to global issues. The element of interest that was most often spoken of was anything related to hands-on learning. This included

project work, not just sitting down, learning to do skills, and physical, interactive, hands-on projects. Scott, age 15, described such a project as, "A hands-on project motivates me and gives me a chance to see if I did it right or wrong, without anyone telling me. I can just tell."

As mentioned in *Section 1*, students reported factors of interest in their classes. Students responded that they were interested in an activity when they used technology, worked in groups, incorporated games, or when teachers used humor, and that students remained interested in an activity when it was meaningful, career-oriented, or relevant to their interests.

Students further reported that they worked harder when interested, that interest leads to more interest, and that "it's fun learning new stuff." Interest leads to effort, according to these students, and as Ashley said, "if kids aren't interested, they won't do the work." While this view may have been an extreme representation of all students, it didn't resonate with Alex. She said that she tries harder when not interested because "being interested isn't what's important. Getting scholarships is what is important, so *that's* the goal, not being interested." Alex was one of the few students that picked up on the notion that, while interest is important, interest isn't the goal.

Interest – boredom.

One can expect that with interest as a main topic, it wouldn't take long before boredom came up as a related topic. Boredom for students was the absence of interest or engagement in the class or activity at hand. While boredom doesn't need to be elaborated upon, school is best described by Katherine as "boring! School is a lot of sitting still and doing nothing but listening to lectures." Ashley said she has a love/hate relationship with school, she loves seeing her friends, but she hates the teaching. "School is so long, then there's the homework at home. There is no time for me."

While school can be boring at times for all kids, many kids have developed coping mechanisms when a particular activity gets boring. Students in this study identified a variety of coping mechanisms for coping with boredom. One category of coping mechanisms refocused the student so that they were able to concentrate on the task at hand. The other category pulled the student further away from the task at hand by providing mental and physical separation from the task. These are acceptable so long as the student diverts himself or herself long enough to take a break only so that he or she can return to the task at hand momentarily. The risk, however, is that the student may wander off completely (mentally or physically according to the respondents). The first group I chose to call Task Approach coping habits (TAp) as students employed them to reengage in the activity, and the second group I chose to call Task Avoidance coping habits (TAv), as they pulled the student off task.

Students who identified with using Task Approach coping habits reported that when bored they would:

- Take a break, come back and try again
- Remain persistent
- Make lists of what they had to do then begin checking off the list
- Ask themselves something they didnøt know about the material to make it more interesting, thereby raising their own interest levels and effort (this is known as a curiosity gap)
- Give self small rewards
- Set short goals to meet
- Ignore task and come back to it like it is new
- Make a game out of it, like try to race a peer or the teacher to finish the task
- Focus better
- Ask a friend to explain it
- Do some research to get a better grip on the topic, raise interest, and get a better grade.
- Fidget (Katherine said that when she is bored she fidgets. õI fidget to stay focused. My hands are busy, but my mind is focused. I have to play with my necklace, a pen, or something. So I sit and fidget to pay attention, then I get in trouble for fidgeting because I canøt sit still, and the teacher doesnøt recognize that Iøm really trying to pay attention.ö)
- Highlight main ideas or next steps. Said Helen, õI like art, so when Iøm highlighting I feel like Iøm at least doing something I like.ö
- When Iøm bored, goals keep me hanging in there one step at a time.

Task Avoidance coping habits that students admitted to employing were as follows:

- Procrastinate
- Take a break
- Get a drink
- Walk around
- Daydream
- Doodle
- Talk to friends
- Leave the environment (Beth reported, õMan, sometimes, I just have to get out of there!ö õSo what do you do?ö I inquired. She rattled ofF a litany of rapid fire responses, õCan I go to the bathroom?ö õCan I take this to the office?ö õCan I blow my nose?ö õCan I go to the nurse?ö õCan I turn this assignment in to Ms. Jones?ö õSometimes if I canøt think of what to say, I just mumble something to the teacher, –murmur murmur murmur, Bathroom?øand they just let me go.ö

Regarding boredom, students gave a variety of reasons a task or activity may be boring. Participants said the work was likely too easy, lectures were too long with little or no student interaction or engagement, the teacher was unenthusiastic, there was no connection to topics of relevance to student, or no relation to interest, activity was routine/occurred daily, not hands-on enough, too abstract, or just plain dull, õworksheet after worksheet after worksheet,ö said Emily. According to Josh, õI find myself looking at the clock multiple times during the class.ö

In some cases for some students, boredom related to actually having nothing to do. According to Emily, õIøm the most bored in the time between when Iøm finished and the rest of the class isnøt. So I just read or spend time in my own head.ö

Relevance – as a function of interest/passion.

Many respondents expressed frustration about school in terms of the curriculum or class activities being irrelevant in their view. Granted students may not be aware of the broader scope and sequence of the compulsory school curriculum, but in light of their own interests, the curriculum seemed irrelevant. In order to maintain interest or persistence in a task, student

participants ask for relevance to be considered in the curriculum. According to Patrick õYou can make anything interesting.ö

Participants universally agreed that when curriculum is relevant (to personal goals, interests, current events, future careers, job skills) that it is more interesting, and when it is irrelevant, it is less interesting. This does not mean, however that, if uninteresting, the curriculum is irrelevant. It is likely that students are unaware of the significance of the curriculum and its relevance must be explained. For example, Helen described her struggle with science by explaining, õScience and Math are hard for me because they have nothing to do with things I want to do later in my life. Why do I need to know about rocks? Yeah, I donøt get science; I donøt think rocks can be very useful for me.ö

While I donøt expect every student to understand how or why their own scope and sequence of academics has been prescribed to them, I would expect each instructor to make it clear why his or her students should learn the material by saying something to the effect of õWe are discussing scientific processes, and we are using geological structures to examine the scientific process. It is the scientific process we are discussing, not rocks themselves.ö

But even describing the above process doesnøt necessarily endear the child to the curriculum. Patrick said, õTeachers need to incorporate current events into classes today. Because if you are learning something about the past, you need to know how that will affect us today, too, not just why it was important back then. For example, I donøt see the point of reading Shakespeare, I like recent history.ö Despite the fact that Shakespeare is literature and not history, a fact either lost on Patrick or not explained well by his instructor, illustrates his point well, that Shakespeare does not seem relevant to him.

Trevor and Andres made similar claims. Trevor said, "I like focusing on world problems, CNN Student News, and picking topics of interest to me." While Andres added, "I like Humanities because we discuss what's going on in the world currently." While student participants didn't always agree on how they defined relevance (relevance to goals, interests, careers), they did agree that when they identify class work as relevant, that it is far more interesting.

Effort – as relates to persistence or "grit".

Initially respondents spoke of many factors of effort. Students mentioned how they would "hang in there" to accomplish a task. Students also mentioned that they were more likely to hang in there if the task was interesting. In the early stages of recording this concept, I had called it effort, persistence, stick-to-itiveness and even academic endurance. But in the course of this study I became familiar with Angela Duckworth's research into "grit," which she defines as persistence and passion for long-term goals (Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R., 2007).

Students reported that they were more likely to persist if they found the task interesting - at least, all but one student. As mentioned earlier, Alex said that she was more likely to persist if the task wasn't interesting because it is likely that the goal is more important. She gave her perspective that interest isn't what is important, scholarships for college, (that is, goals) are what's important.

But while interest is an important factor in effort, it isn't the only factor according to several very dogged respondents. Students who possessed this quality kept describing factors that fit this description of persistence. For example, James reported, "I care about school, and doing well. I get up early, work hard. My family motto is 'Never give up, never surrender.' I

work hard to be on top. I don't like being on the bottom. There's someone out there that's better than me, so I have to work harder and harder to be my best. I try hard so I can get better. Plus, I work hard for compliments from parents, coaches, peers, and also trophies like for sports, or prizes for competition. Plus I want to be like my older brother." James went on to acknowledge, "When I need to get work done, I just think about what 'should' be done, and do it one step at a time. You should always do your best. School is seven hours long, if you don't work hard, you just wasted it." This sort of sentiment isn't exactly what you would expect from a 15 year old, but then James is an experienced three-sport athlete who manages his time well, and has a goal to be college bound like his older brothers. In other words, he is passionate and persistent in his pursuit of long range goals, and it is a trait that he has developed with the help of his family for years. But he is not unique.

Iona, another student who is earns good grades and is heavily involved in sports, has learned how to break down tasks to more manageable chunks so as not to get easily overwhelmed. She said, "When I need to press on, I make myself, use planners and stuff, and they help me achieve and accomplish my goals. I've never been in a basketball game and had people say, 'I can't play anymore, I have to quit!' With any task, we can finish this: win or lose. It's not like we can't." Iona's advice to other students is simple. "Students who don't do work or get frustrated just maybe haven't learned to break things up simply. Like, I know people who get stressed out because they're listing everything they have to do in the next 24 hours. I just tell myself that there's only so much that you have to do right now. Like I only need to go to practice for 2 hours. Just handle this one thing, and move on."

Not all students are so adept at executive skills that they know how to manage time and commitments. But those that do report having an easier time managing the pressures of school.

It appears to have nothing to do with intelligence, or achievement, but the executive skills of organization and time management. While James puts his head down and doggedly presses on, Iona makes lists and just takes things one step at a time. Yet, a third student, Phoebe, has another approach to regrouping. Said Phoebe, õIf I feel myself getting frustrated, or donøt know what to do, I 1) Take a deep breath, 2) put down what Iøm doing, 3) walk around/take a break, 4) get some water, 5) come back, refocus, restate the task, 6) try the task two times, then, if I still need to, 7) ask for help. In other words, I think about what I have to do, and do it, and then see where I still need help.ö In an elegant nutshell, Phoebe described simply the phases of self-regulation ranging from forethought/pre-action, action, and reflection/reaction.

Of all the student responses regarding persistence, Scottøs response seemed most indicative of the characteristic. I asked him if he did well in school because he was naturally talented or because he tried hard. Many students exert very little effort and still manage to do well. Scott replied, õI donøt feel very confident in school. I have to work at it. It requires work for me unlike others. Therefore, I do well because Iøm dedicated. Itøs not so much that Iøm talented.ö

Given the concept of grit, these four students all exhibit it, especially Scott. My question is how to instill a sense of grit in all students. But if the definition is any help, it requires three elements: passion, persistence, and goals.

Effort – as relates to goals (proximal or distal).

Students in this study who do well in school, defined as earning a 3.0 GPA or better, are able to articulate their goals well. There is a correlation between those participants that either had vague goals, or no goals at all, and those that had very clear goals. Those that had clear goals seemed to perform far better in school than those without them. Whether or not this was

related to a sense of maturity, executive skills, parental influence, organization, personality or otherwise remains to be investigated, as that was not in the scope of the study. What is certain, however, is that those with clearly defined goals did better academically.

For some students the clearly defined goals were career objectives that they would like to accomplish in the not-so-distant future. For other students, the goals were qualities or characteristics they did or did not want to embody. Phoebe, for example had a goal to be different than either of her parents. While this sounds on the surface like teenage rebellion, it is, in fact, quite the opposite. Raised by her grandparents, Phoebe said, õMy parents are divorced, my mom died in 5th grade. My stepmom killed my dog with a shotgun, my dad turned to drugs and is in jail for beating up my stepmom, she was bleeding to death and my dad had a gun to her head and I had to call the cops. So my goal is to be the opposite of them. If I do the opposite, I should have a good life.ö

Nolan has a similar story of a goal to be different than his parents. õI need to do well so I donøt end up like my mom. She was 14 when she had my brother and me at 17. I want to get a good job, and a college education. My mom is always telling us to do well in school because it means a better life.ö

Alex has a similar story. She reported, õI donøt want to work in a cannery. I want to be someone. I think about college and my future. I donøt want to be like my parents. My dad is in jail and my mom still struggles. She had a hard past. I think about my future goals every day. I want a stress free life. I watch the news a lot, I know what is going on in the world, and itøs crazy. It motivates me to do what my mom taught me, to look ahead. We live in the present, but also in the future. I want to help people when I grow up. I love babies and I want to be an obstetrician. My goals keep me focused, I think of my goals every single day. I want to have a

life where you are supported and you don't have to worry about all of these things and be stressed. My mom is stressed and it makes me sad to see her stressed about money, making it in life, paying bills, paying for our apartment."

Alex also went on to describe a facet of goal setting, which is delayed gratification. "I have patience, I can wait. Last year around my birthday I saved $800 to get a horse, and I bought two of them. I can be patient. My horse is like my first car."

Some students also use goals as steps to achievement. Several students described the importance of proximal goals in order to make progress toward distal goals. Iona, the list maker, reported, "Steps and goals, steps and lists help me get work done in manageable chunks." Scott reported similarly, saying, "My goal is to get good grades so I can be in sports, but also so I can be in civil air patrol. My goals are my rewards. Deadlines make me want to try harder."

Goals are also value-laden, as they relate to things we desire – either the goal itself, or that it unlocks yet another opportunity down the road. Scott mentioned sports and civil air patrol. James reported similar notions regarding sports. "Sports are important. You must have good grades or you can't do sports." Another great example of a value based goal is from Nolan, who said, "failing would basically mean you're giving up, and I don't like giving up."

Goals can also be the avoidance of negative consequences. Beth reported, "Negative consequences motivate me, like I don't want my mom to be mad, and I wouldn't be able to be in sports if I didn't pass classes." Likewise Arturo worries about negative consequences having said that "they motivate me to do well, like when my parents take away my stuff. And I need to work hard so I don't look dumb in front of my friends." Phoebe also avoids the negative consequences and said, "It's important to me that I meet my teacher's expectations, and I don't want to let me grandparents down. I need to make others happy, I'm afraid of what others will

think. I don't want to disappoint anyone." And Ashley represented the epitome of performance avoidance when she said, "My goal in school is to not fail. When I'm bored, my goals keep me hanging in there one step at a time."

  Effort/achievement – as relates to interest.

  If grit is a combination of passion plus persistence in the face of long term goals, what happens when there is no passion? In this subsection, participants respond to how little effort they applied when they were not interested in the subject.

  Josh and Ashley are very bright students who do not need to try in order to pass tests. However, they do not get good grades because, while they pass tests, they do not do the homework. According to Josh, "I do well on tests, because that's what's important. The rest, not so well, like homework, I just don't feel like doing it. I do worse in homework because I'm not interested in it. It is boring and repetitive. I do better when work is interesting, such as group work and projects. I do well at tests because I feel like those are important. I don't do well if work is repetitive or boring. If I know the material the first time, and they give you a bunch of assignments in chapters, why do I have to do that too? Once I learn the stuff, I feel I'm doing the same thing all over again."

  Ashley offered a similar response. "School is easy, I don't have to try. I ace tests, but I don't do homework since I know the material. So I get a D. I had to retake Algebra because of that: I aced the tests, but didn't do the homework, so they didn't think I was ready for Geometry."

Effort/achievement – as relates to grades.

One of the greatest surprises in the study was student sentiment about grades. Nearly every participant didnøt consider grades a motivator, nor did they find them very helpful. Below are just a few of the responses.

Helen explained her perception of grades that they are a õreflection of effort/compliance, not intelligence. Grades do not motivate me. I know what I need to do to get an A, I even want an A, I just donøt want to try.ö

Ashley reported that õgrades are neither an incentive to perform nor a reflection of what you know. Theyøre a better reflection of following directions. But they matter for college, so we have to care about them. But grades are not a reflection of what someone learned.ö Patrick responded similarly saying, õA grade is just a letter, it has no meaning.ö

Josh elaborated more about his grade dilemma from the previous section saying, õgrades donøt really mean anything. I get good grades on my tests, but donøt do my homework and stuff. So I get low grades, but I know my material. I do well on state exams because they really do measure how smart you are. Grades donøt. I have an F in math right now, but I pass all of my tests, which doesnøt make sense.ö

But of all of the responses, Iona seems to represent the truest intention for mastery learning. Regarding grades she said, õWe should have more chances to retake tests. With a lot of classes, if you failed it, you failed it. But I think that you should be able to retake a test until you get an A on it, until you get it 100% down. Because whatøs the point of getting something 75% right and then moving on without wondering about the 25% youøre never going to understand.ö

Research Question #3: How do affective states (positive or negative) relate to students'

perceptions of effort and performance?

Interest – teacher relationships.

Me: Do you find school interesting?

Arturo: Depends on if the teacher is in a good mood or not.

While many factors can make or break the school experience for any student, the most important is the school climate, and few things affect the school climate as greatly as interactions with school staff/faculty. It isnøt enough to examine how a student self-reports their effort, motivation, and interest, it is equally important to weigh all of the factors that contribute to successful school experience.

Most students interviewed had much to say about the difference between positive and negative interactions with teachers or, in general, what makes a great teacher versus a poor teacher.

Table 2: Students perceptions of effective vs. ineffective teachers.

Ineffective Teacher	Effective Teacher
• Pushover, too flexible, doesnøt honor own deadlines/guidelines (James) • I donøt work well for Mr. Smith. Heøs a bully. Says things like, õDoes it look like I care?ö and õDoes it sound like thatøs my problem?ö Very discouraging. (Helen) • Mr. Smith just sits behind the desk all the time, reads from the book, and just tells us what to do and instructs from his computer. Class is boring and poorly prepared. (Andres) • Mr. Smith just tells us õHereøs what to do, now go do it.ö Also doesnøt grab our attention, just tells us what to do. (Trevor) • Mr. Smith just keeps piling on work like an assembly line, doesnøt focus on just one assignment, or help us, doesnøt just focus on one thing. (Phoebe) • Mr. Smith drives me bonkers, so passive aggressive. Says please all the time, but in a commanding way, not in a nice way. (Ashley) • Mr. Smith is rude to me, doesnøt like me, no enthusiasm, no relationship, class is so hard when the teacher doesnøt like you. (Phoebe)	• Cares about students, helps, grabs your attention, keeps focused, puts kids back on track, walks around (Trevor) • Shows PowerPoints, prepared lessons, explains things in multiple ways (Andres), • Encouraging, gives praise (Phoebe, Alex, James, Niall) • Energetic, moves around, jokes a lot. (Arturo) • Iøll give more effort for a good teacher. You work for good teachers because they care. A bad teacher youøll give crap even if they donøt deserve it. (Ashley) • Moves around the room, has clear deadlines, high expectations, firm boundaries, is fair, rewards, helps out students (James) • Honest, kind, cares about you and your grades, humorous, jokes around within limits, wants your input and opinion. IN charge, but not.(Ashley) • When teachers tell their life experiences. (Phoebe) • When the teacher is kind. (Alex,)

Additionally, students remarked about what good relationships look like:

Phoebe offered, "I do really well in one class because the teacher loves me. She just always wants my opinion and I love that. But class is hard when you try your best and the teacher is like, 'um-hmm, yeah, that's great.' With no enthusiasm. But I tell Ms. Jones, about an award and she's like 'Yay, I'm so happy for you, nice job.' But with Mr. Smith, it's just, 'that's great.'"

Nearly every student contribution related to teacher relationships was related to affect. Almost no reports were objective reflections about teacher pedagogy. What was reported is what students care about, which can be summarized in the enduring question, "Do you care about me?"

Research Question #4: To what degree can students self-identify motivating or demotivating factors?

Interest – autonomy v. compliance.

One of the greatest surprises in the study was the overwhelming number of responses about student notions of autonomy or choice in their education. Students perceived that there is little to no choice in their education and the overwhelming response of the collective pool of research candidates was the desire for more relevance and autonomy, or choice, in schools.

Autonomy is a key component of Self-Determination theory (Deci & Ryan, 2002a). SDT relies upon autonomy to explain why individuals make the decisions they do. When decisions are autonomous, or perceived to be, a person is much more likely to engage in an activity. However, in the absence of autonomy, that is compliance, people are far less inclined to engage in the activity unless it is identified with a value the individual may hold dear. The individual is most resistant to the task when it appears to be foisted upon them extrinsically, and least resistant

when the task emanates from their own intrinsic desire to do so. Students recognized this dichotomy when discussing thoughts about school.

Students interviewed expressed frustration of the daily gamut of assignments that get handed to them without their input. Every student in the study said that they would prefer to choose from a number of activities or tasks than simply be assigned one. For example, one student, Kevin, implored his teacher, õDo I have to read the Hobbit? I donøt understand it. Itøs not like it can help me in life. Can I read ANYTHING else? Something about photography or space, anything? Please donøt make me read the Hobbit, I just donøt get Fantasy.ö Without going into the merits of literary criticism, or the relevance of fantasy to prepare students in 21ˢᵗ Century skills, Kevin was visibly upset. He admitted that reading was always difficult for him, especially fiction, particularly long novels. But were he able to choose between an assortment of books to read, or, rather than complete the essay at the end, be provided a variety of assessments to exhibit that he understood the material, he believes he would have fared far better.

Every student in the study acknowledged that if choice could be regularly integrated into their instruction, they would not only be more interested in their courses of study, but that they would perform better as a result.

While the respondents in the survey represented a range of personality traits, from mild-mannered to tough-minded, all students exhibited a similar hostility when the topic of choice was brought up. It was as though they all realized suddenly that this was a possibility that has been absent from their academic repertoire for far too long. For example, Trevor responded, õI feel like I should have an opinion with what I study. Itøs my life, nor theirs.ö Even the mild-mannered Iona reported that she õwants more options in school. Iøm a freshman this year, so itøs like, ЌHere are your requirements.øö

Barring the argument for a canon of study, common core state standards, the transmission of cultural values, or the broader sense of curricular essentialism, Trevor and Iona both have valid arguments, which raises the question: Who is the client, after all? The Child or Society?

There seemed to be a common sentiment from the participants that the reason there is less choice in school is because teachers believe students would just pick the easiest options. Several different perspectives from students, however, countered this idea. James related that, "I like having choice more than no choice. If you're interested, you will like it better and pay attention more." Josh said, "Choice increases interest. Disinterest leads to low effort and kids will just quit." Alex replied, "I don't like reading a book that someone else gives me. I like being able to pick my books. Not, 'Here's a book, you've gotta read this.' I like to go to the library and choose the book I want. When given a choice in my classes, I do better. I read all the time when I choose. But I don't want to when not chosen." Finally, ever the positive one, Nolan said, "Sure, give me a choice of 3 books to read. It gives me more options than just one. And since I like reading, I might just read all three." Perhaps the best answer that should inform the practice of any teacher came from Scott, "If given a choice, I'm more likely not to do the easiest thing, but the most interesting thing."

While the previous students were addressed ideas of choice and autonomy, other respondents had a warning for teachers regarding compliance. Helen warned, "Most teachers don't give choice. If given a choice, you can pick what interests you, and something you're better at. But if it is boring, I won't do it. And if it is just handed to me I won't do it." Ashley replied similarly saying, "No, I'm not going to do what you're telling me, even it if it is in my best interest. Just let me make my own decisions."

There were far more reports related to autonomy and compliance, but the important thing is that each participant was adamant about the importance of choice in the curriculum. It is probably the most unified and strong response from the entire pool of participants.

Effort – as relates to anxiety, depression and mental health.

Another surprise in the study that was completely unintended, was the self-identification of participants with their own stress-levels. For several students, reporting stress levels opened up topics of depression, anxiety, panic attacks and, in two cases, Post-Traumatic Stress Disorder from events earlier in life. While completely unintended in the scope of the study, this discovery raised the awareness and level of importance of connecting student mental health with school performance, and the importance of sharing with teachers how a student best copes with these elements. For a couple of students, stress levels arose from family and domestic issues, and for others, stress and anxiety were exacerbated in the school context. I could have easily left this out of the study, as it was unintended finding, and the scope of the study is large enough as it is. But to do so would have ignored a very real concern for four female participants and, in a broader sense, most likely the millions of American students in similar circumstances.

Two students, who I had perceived to have it all together (high achievers, little effort required to achieve) were nearly crippled by anxiety or depression. It made me realize that we cannot always know what is occurring just beneath the surface of a student. Four students, all high achieving girls, reported the most issues related to mental health. As this study did not incorporate student mental health, I cannot delve into the intricacies of the reports of these girls. But this self-reporting on the part of the female students did appear to have an impact on their effort and achievement. In the case of Phoebe, it was a positive effect as far as grades, but

increased her anxiety, and as far as Ashley, Helen, and Emily their grades suffered greatly as a result of their anxiety and depression.

I include this in this section as a finding, a surprising one at that, because for four of the 18 respondents to be crippled by anxiety suggests that a large part of student populations in schools in general are likely to be plagued with similar populations of girls fitting these descriptions. As their principal I was unaware of these elements in my own school, suggesting that student mental health concerns are a very real dilemma facing American students and schools. And so long as mental health concerns are affecting effort and achievement of our students, it must be addressed if we are to serve these students well.

At the conclusion of this study, one of the four students associated with anxiety and depression, Helen, withdrew from school to pursue an online school for reasons of social anxiety. Another student, Emily, has missed a considerable amount of school recently as we continue to determine the nature of the issues she is dealing with. She is currently in a mental health facility for an extended period by the direction of local mental health professionals. For four students of a sample of 18 to identify anxiety outside the scope of the study, and two of those participants to either transfer or be gone from school for a considerable length of time illustrates, anecdotally at least, that the concern of mental health cannot be ignored. While not a quantitative study, I believe we can infer that issues of mental health require further investigation in terms of exactly how these issues impact the lives, effort, achievement and well-being of American students.

Anxiety and the physical environment.

Some students found themselves battling unseen enemies the moment they arrived at school. According to Helen, ôI donøt hate education itself, I just hate being here. When I think

of school, I think, "Ew." I just don't like people I guess. I'm even scared of ordering food at a restaurant."

Emily who has anxiety and friends with anxiety, wished for teachers to understand that "a lot of time some kids have medical issues like anxiety and depression, and telling them to get up and read a report is like telling them to stand in front of a firing line. I don't think they realize that."

Scott, an introvert, doesn't think school "should be about social things. It should be about learning. I don't like the time between classes where people socialize, I just want to get to my next class. And I don't like group work either; I'd rather just do it on my own."

Helen, the participant most crippled by anxiety, described school as follows, "I just want to be home, and not around people. In school I feel anxiety and stress. In summer I feel fine, but when school starts I get sick a lot. Anxiety around other people includes large classes. I don't like to ask for help due to my anxiety, fears of looking stupid in class in front of others. If I try to ask for help, I feel like I'm stupid. So I'm not going to ask for help in front of 30 people. When a teacher yells at me (for daydreaming, not following along) I just need to go out and cry. (Begins crying) Mr. Smith yells to get the attention of the class because it is a large class." Helen cried twice during the span of the 30 minute interview.

Anxiety – physical symptoms and crippling effects.

The physical symptoms of anxiety don't always erupt just from the physical setting of school, Emily and Helen both struggle with suppressing their own thoughts during the course of the school day. Emily said, "I get panic attacks from really bad memories. Like, there are ways that I can keep memories away, and they're locked in a box further behind anxiety and

depression. I keep those very far away and when I start talking about it, I shake, cry or have a panic attack."

Helen added her own perspective saying, "I feel like crying a lot at school. I either do, or I am on the verge. Like this morning I was shaking because I haven't been to school for a while. It is always like that when I come back after an absence (which are related to anxiety), just anxiety all over the place. I'm either crying or throwing up or shaking."

Phoebe reported the crippling embarrassment of being pointed out by a teacher for doing an assignment incorrectly. "Mr. Smith pointed out what I was doing wrong in front of everyone and I had to get out of there (begins crying). I was thinking, 'Why does he treat me like that? Does he not like kids? Does he not like his job? Is he not happy in his marriage? Why did he treat me like that?'" Phoebe, a people pleaser, must work hard to receive praise, when praise does not come forth, she is crippled by it.

Helen has a cyclical issue with anxiety. She is anxious so she misses school, gets behind, doesn't understand the homework, which then causes more anxiety and causes her to miss more school. "Homework is tough," said Helen, "because I miss so much school (because of anxiety) that I don't know how to do it so it causes more anxiety, and I miss more school. I want to do work, and don't want to at the same time. When I don't do it, I feel really bad later, like, 'What was I thinking?' And that increases anxiety." Emily is no different, "When I really get stressed is when I get too far behind. From there it accelerates into anxiety where I start to get physically sick walking into the classroom. I feel like I'll throw up, and then I can't focus, and then I can't get the work done and the anxiety increases. Eventually I slip into a deep depression and I can't do anything." Emily added, "I wish I could just be average. No pressure to perform, no expectations, in order to lessen stress."

Anxiety and coping strategies.

The girls interviewed that reported on their own anxiety and depression have developed their own coping strategies to some degree. Said Emily, õIøm a mess. But school is like a theater. Iøm a good actress, and just tell myself, ‒Put on the mask, put on the mask.ø But I get stage fright in real life. But if I have to do better in school, give more effort, it would increase my anxiety, so it wouldnøt be worth it.ö

Helen resorts to music de-stress. õWhen I get stressed, I listen to music, then I get into trouble in class, which stresses me even more. So I canøt listen to headphones, so I play songs back to myself in my mind to prevent from feeling to emotional or stressed. I do that for the majority of the day, even though it hurts my grade. To prevent myself from crying, I play songs in my head. I have a bunch of videos and songs in my head for the whole day. I can play them back when I need to.ö

Emily summed up her experience saying, õThe problem with anxiety is it feels like life comes at you all at once.ö I wish she could take a tip from Iona about how to make lists and just tackle the first item, not all of them at once. Said Iona, õJust handle this one thing, and move on.ö

Surprises in the research.

The greatest surprise to me from the result of my research was the self-reporting of anxiety, depression or other mental health issues as debilitating factors of the school experience. The surprise occurred because none of the questions in the interviews related to mental health, anxiety or depression. But when asked questions related to motivating or demotivating factors, four participants, all girls, self-reported their experiences with mental health.

The second surprise was just how enthusiastically the students responded to the concepts of interest, boredom and choice/autonomy and compliance. It is very apparent that students want to be interested in school, and that they want to have more say in their courses of study, and the assignments therein.

The third and final surprise was that students don¢t find grades to be meaningful representations of performance. This last surprise, and the reports of grades and effort, have me to consider a theory of an Economy of Effort, which I will explain further in Chapter 5.

As the point of grounded theory is to examine a phenomenon or series of phenomena to explain a context, it naturally follows that a theory would emerge. At this point, I see two theories begin to emerge from the data. The first is a Theory of Economy of Effort, which explains how students choose whether or not to do work, or to what degree. The second is a Theory of Student Engagement that explains the various factors that influence student interest and relevance, the degree to which they exert effort and how they finally achieve.

Considering that Chapter 4 is about the findings of the research, I deliberately placed descriptions of the previously mentioned new theories in Chapter 5 for discussion.

Chapter 5: Discussion of the Findings

Summary Statement of the Problem

The purpose of my study was to determine to what extent students (ages 13-15 from a rural school district in southwest Washington) were self-aware of their own motivation and to what extent their awareness related to their perceptions of effort and performance. I have drawn upon five different fields that attempt to explain motivation and goal behaviors: Self-Determination Theory, self-concepts, Achievement Goal Theory, and self-regulation, and interest and affect. The research questions generated for this study were rooted primarily in motivation. The secondary emphasis of the research questions involved affect, effort, and achievement in order to determine how studentsøperceptions of each of these four factors correlate with one another. The research questions are as follows:

1. To what extent do student perceptions confirm extant motivation literature?
2. How do student perceptions of interest, effort, motivation and achievement relate to one another?
3. How do affective states (positive or negative) relate to studentsøperceptions of effort and performance?
4. To what degree can students self-identify motivating or demotivating factors?

In order to maintain consistency between Chapter 4 and Chapter 5, I have retained the same structure of listing the research question along with the appropriate subheadings. However, only subheadings that yielded the richest analysis and discussion have been retained. After the conclusion discussion within each research question and subheading, I will discuss the

emergence of two new theories, as well as discuss the larger scope of the study at the end of the chapter.

Discussion:

   1. ***To what extent do student perceptions confirm extant motivation literature?***

As mentioned previously in chapter 4, student perceptions confirm a great deal of extant motivation literature. But rather than seek to confirm extant literature, the value of the confirmation lies in developing a lexicon of lay terms used by students and practitioners alike that are synonymous with research literature. Also, it is a comfort to know that students identify their experiences in terms similar to the complex research terms designed to describe their own experience.

2. ***How do student perception of interest, effort, motivation and achievement relate to one another?***

Interest: (The emergence of a theory – Theory of Student Engagement)

The discussion of this item relates to the emergence of a new theory, the Theory of Student Engagement. There are many theories in education for motivation, achievement motivation, goal theories, self concepts, etc. But by bringing them under one study, juxtaposing them in the form of student surveys, and examining inter related themes, I believe I was able to arrive at a working theory of the whole child that will help teachers and students promote student achievement.

Too often the child is put in a gauntlet of learning to endure for 180 days of school. This requires a sense of great endurance, and only the most diligent of children are able to pace themselves, chunk information, and proceed through the steps necessary to truly achieve. Some

children have greater executive skills to be more organized, and therefore break tasks into smaller, more manageable chunks in order to accomplish these with greater ease. Some students possess large reserves of will power (self-regulation) in order to endure long tasks in pursuit of a goal. They are able to delay gratification in favor of a larger distal reward. Many students are able to channel their interests into the task to also endure. But the majority of students do not have all of these skills available to easily accomplish the rigors and trials of school. Rather than being of a dispositional nature, these skills are learned and, therefore, available to all students. But certain factors must be addressed, among them, relevance and interest.

Engaging students to achieve includes many components. At our core, as humans, learning is engaging as we set ourselves to task to learn things that are relevant to us. But with the common expectations of a standards curriculum, what students are expected to learn isn't always what they are interested in. But I do not believe that is the most crucial or critical element that complicates matters. I believe that school still has enormous remnants of behavior science and scientific management, so students are doing work that makes them appear busy, but teachers are not always facilitating an environment for instruction, invention, discovery or the like. Instead, teachers are often defaulting to their own understandings of teaching, or their own interests which fail to engage the learner.

For example, in my time I have seen far too many teachers and administrators (in other words, the culture of school) more focused on compliance than learning. And while learning is touted as the highest good for the school, I do not believe all teachers can agree on what true learning looks like. Grades are still prevalent, and yet a conversation that has spanned decades fails to gain traction that maybe grades are too subjective to the unique experience of the teacher, that there is no scoring calibration among peers, and that it may actually help students to access

clear and measurable criteria to indicate what has been mastered and what still needs to be mastered, as opposed to feeling disappointed that the student only scored a six out of 10, but doesnøt know why.

Also, teachers often love what they teach, which is why they entered a profession in which they could teach it. But the enthusiasm does not always follow. A teacher who loves grammar because they are competent at it, may drone on teaching grammar (which is important) the same way day after day and not be aware of the glazed eyes. Teachers believe it is important to churn through the decades of the American experience, and while that may be true, they havenøt conveyed to their students why it is important. The response: because I said so, does not engage students.
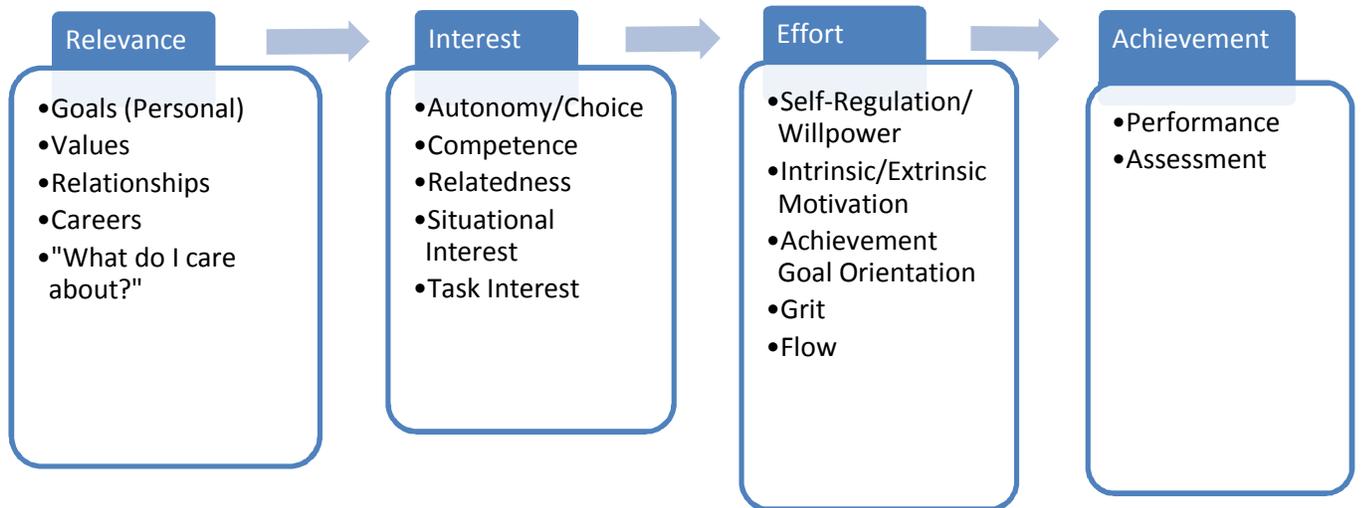
We have a huge chasm that must be addressed if our students are to achieve. Engagement appears to be a term that encompasses relevance, interest, motivation and effort, but I believe each of these terms is worth considering in isolation. Teachers sometimes boast that their students are engaged, when they actually mean that they are merely on task, in isolation on an activity ó no peer collaboration, no discussion among groups, just 30 students in the same room working quietly on a work sheet. These students may be on task, for fear of some sort of retribution, but not engaged.

I believe a clear and focused attempt to discuss engagement in our nationøs schools is the conversation that leads to the achievement gap conversation. Address the engagement gap, and the achievement will take care of itself. Schools should be more like museums, parks, science centers, zoos, etc. Teachers must be adept at engaging students by considering all of its elements. But for some reason, engagement is an after thought, as though throwing instructional strategy after instructional strategy at students will encourage them to undertake the task at hand, natural

and effective teachers understand this, but it doesnøt come easily to most teachers. Engagement is easy to leave aside when we õmust cover the curriculum,ö get through the content, pass the tests. But to do any of this, we must engage the learner.

I am proposing a Theory of Student Engagement as an attempt to help the practitioner rely on a body of tools to ensure that all students are truly engaged, as opposed to simply passive or on task. Student Engagement Theory requires the practitioner and the student to consider four elements of engagement in order to be comprehensively engaged: 1) Relevance, 2) Interest, 3) Effort, and 4) Achievement. The process of this theory is represented by the following chart:

Figure 1: The process of Student Engagement Theory

Relevance
- Goals (Personal)
- Values
- Relationships
- Careers
- "What do I care about?"

→

Interest
- Autonomy/Choice
- Competence
- Relatedness
- Situational Interest
- Task Interest

→

Effort
- Self-Regulation/ Willpower
- Intrinsic/Extrinsic Motivation
- Achievement Goal Orientation
- Grit
- Flow

→

Achievement
- Performance
- Assessment

Upon establishing the desire and value a student has to learn, and their reasons for learning, we can establish relevance. The findings of this study clearly indicated the importance of relevance as a vehicle for interest. Also, interest was closely tied with autonomy and choice. When a student feels he or she is in charge of their own process, they are much likely to immerse themselves in it and engage themselves accordingly. Third is effort, and relates to the actual business of conducting oneself to succeed. Grit, determination, persistence, willpower and self-regulation are all synonymous with forms and reasons of effort. Finally, achievement is the culmination of all of these things and requires not only the affective impetus emanating from relevance and interest, but also requires the cognitive know-how to proceed through the task and achieve.

There is a reason I called this a Theory of Student Engagement as opposed to a number of other options. First of all, I believe that there are already a number of motivational theories that seek to explain achievement, motivation, achievement motivation, self-determination, self-regulation, self-efficacy, achievement goals, and more. But I believe these are narrow in scope for research purposes and do not encompass the broader scope of the learner in the context of school. Furthermore, the term of ‑engagementø is used little in the research literature as I believe it has not been operationalized as its synonyms have. Therefore, I am seeking to claim it to develop a working theory (a practitionerøs theory) that could be applied in the school setting. If teachers could consider all of the elements of this theory and try to engage learners at each stage, I believe they would produce much more engaged learners and higher achievement.

Interest – Boredom

Boredom is the antithesis of engagement. If we are to engage kids we must engage them with relevant, interesting material. As Patrick said in chapter 4, õYou can make anything interesting.ö This is a challenge I would expect all teachers to undertake.

While most of these are positive coping strategies to engage the learner in the task at hand, some of them are simply ways to make the task at hand interesting enough to undertake. Like a self-administered õspoonful of sugar to help the medicine go down,ö Dewey calls attention to this plight in The Child and the Curriculum saying,

> Familiarity breeds contempt, but it also breeds something like affection. We get
> use to the chains we wear, and we miss them when removed. ‗Tis an old story that
> through custom we finally embrace what at first wore a hideous mien. Unpleasant,
> because meaningless, activities may get agreeable if long enough persisted in. *It is*
> *possible for the mind to develop interest in a routine or mechanical procedure if*
> *conditions are continually supplied which demand that mode of operation and*
> *preclude any other sort*. [original italicized] I frequently heard dulling devices and
> empty exercises defended and extolled because õthe children take such an
> ‗interestø in them.ö Yes, that is the worst of it; the mind, shut out from worthy
> employ and missing the taste of adequate performance, comes down to the level
> of that which is left to it to know and do, and perforce takes an interest in a
> cabined and cramped experience. (Dewey, J. The Child and the Curriculum, 1902,
> p. 36)

Effort/Achievement – as relates to grades (The emergence of a theory: Economy of Effort)

The findings in this study indicate that students did not find grades meaningful or motivating. Grades have been a dilemma for educators for decades. On the one hand, the grade can act as an incentive to do the assigned task, and on the other, the grade can serve as feedback indicating a student's overall performance on the assigned task. But it seems that teachers don't know which to use, or why, so they use some combination of both.

Unfortunately, the student not motivated by grades is less likely to do the assigned work, so assigning a poor grade as an "incentive" or feedback only dooms the student to an ever-broadening chasm that will be harder and harder to make up, given the law of averages over the course of the semester. Furthermore, grades are often marked down for late work, or assignments are denied altogether if too late. In this case, there is no opportunity for feedback, and the "incentive" of the grade serves instead as the teacher's pound of flesh for incomplete work.

But what does a grade really mean? What does an 87% mean? Or a B-? Can there really be an informative feedback system absent a scoring guide or rubric, or narrative system in which the teacher confer with the student? Many school systems are moving toward rubric systems that begin with self-assessments, progress to peer assessments, and then to teacher assessments of student work, and in each case using the same rubric so that there are no surprises and that the student uses the same mechanism for scoring as the teacher would. This promises to serve as a true feedback system that informs a student as to how he or she could improve given the assessment criteria and the performance task. Yet so many teachers still resort to mere percentages, and for some reason, the majority of the percentage is in the failing range (0%-59%) and not even distributed evenly.

This hypocrisy is not lost on students. Consider that a 75% on a math test is a C, because 75% of 100 is designated as a C on a classroom scale. But a student may report his or her GPA as a 3.0, which is a B average on a 4.0 scale, despite the fact that 3.0 is 75% of 4.0. But any student would clearly favor the 3.0 over the 75% on a test, even though the percentage is equal. Grading scales can be confusing to students because there is no connection in their mind between their performance, a letter grade, and the numeric scale established by the instructor.

In recent years there has been an effort not to grade learning, but to grade for learning, that is, to use feedback systems to indicate how a student may perform well and continue to do so. The greatest problem in this instance is twofold: tradition and economics. In the first case, a teacher would have to arrive at the conclusion that their systems were not serving students well. But, having been employed for so long, the expectation is upon students to get used to the system as opposed to change the system to benefit students.

The second problem is economic in nature. Teachers are not economists. I had a recent conversation with a teacher and asked how he would score a particular assessment. õOh, Iød probably give it an 8 or a 9,ö he said. õYou mean you are not sure,ö I said? õIf you cannot explain to the student whether it is an 8 or a 9, then your scoring guide or rubric does not work. The student must know exactly how they would do, there can be no room for bargaining, negotiating or guess work in assessment.ö

Students are not foreign to this idea. They are dealing with false or manufactured economies in every class they encounter. This teacher doesnøt accept late work, and tests are 50%. That teacher marks homework as 10%, tests at 70% and quizzes as 20%. Yet another teacher still awards extra credit, and awards for ÷effort.ø In a way, students navigate false economies all day long, but teachers are not economists. A six-period day for a student is like

navigating through six separate countries each with their own exchange rate. And the exchange rate is a mystery often known only to the teacher.

For this reason I have coined the Theory of an Economy of Effort. I have not coined the term Economy of Effort, as that is borrowed from the field of linguistics. An economy of effort in the field of linguistics allows cultures to develop words over time that expend the least amount of energy culturally speaking. For example, there is no "p" in the word "something," although we pronounce it as "sumpthing" because it is easier to say. The same is true for "warmth" which we pronounce "warmpth."

I am deliberate in the use of the term, economy of effort, because teachers have been known to refer to students as "lazy." The problem with this conclusion is that it is not based upon a report, or even an inference, rather it is a value-laden judgment, and it is not fair to students. In the case of the words "something" and "warmth" above, I would not consider a speaker "lazy." I would merely arrive at the conclusion that the effort involved in using those terms is most economically effortless and therefore easier to pronounce them differently. I could say the same for Scottish cognates in English such as skirt/shirt and skip/ship (as we still have the word "skipper"), knowing that it is easier for the tongue to slur an "sh" sound than to enunciate an "sk" sound clearly.

I illustrate these points to suggest why I have chosen the name of this theory. Too often I have heard a student described as lazy. When I ask why, the rejoinder follows, "He won't do his work." I once heard a clever rejoinder that went, "Correction: he won't do your work. Just because you assigned it, doesn't make it his. I've never met a student who wouldn't do 'his' work."

This economy of effort is every bit as important in light of a) the number of manufactured economies at work in the form of grading systems for each classroom, and b) how many students choose not to do work because they do not feel it is relevant. If schools were free market economies, how many teachers would be out of business? In one interview, Patrick, age 14, said, õI could spend 30 minutes on an assignment and get a B. Or I could spend 4 hours and get an A. But if I get a B, I can be done and do something I enjoy, like hang out with my friends.ö What this student acknowledged was opportunity cost. It isnøt worth the extra time to get an A, when he could have so much extra time to hang out with friends.

The first problem with our false grading economy is that we allow students to do mediocre work. In a recent conversation with a teacher, she said, õí what if there was a single line: acceptable versus unacceptable. Then work would be done, or not done yet. Keep trying.ö As it is, we allow students to be done when we award them a C.

In the business world, the old adage is that work will be done on time, according to budget, or according to specifications: pick two. In a system of three criteria, only two can be constant ó one must be a variable in order to allow for flexibility. The same is true for schools. We also have three criteria: a) time - 180 days per year, b) content - the compulsory school curriculum, and c) learning ó on a scale from 0% - 100%. A and B are the constants and C is the variable. But if we really cared about learning, wouldnøt C become a constant and A become the variable? Then we wouldnøt have arbitrary economies in the classroom, but genuine feedback systems that informed students as to their progress against the content.

What if students could leave school if they had learned everything necessary to achieve mastery prior to the 180 days of school? Iøll bet students would likely achieve mastery sooner. As it is, if everybodyøs last day of school is June 4th, regardless what GPA or class grade

everyone has, we just may continue to perpetuate false economies, and we will continue to have students making economic decisions related to their effort.

The first step in addressing the Economy of Effort Theory, is developing a common currency and economy in each classroom. The second step would involve explaining clearly how the economy works, and how to use it to your advantage, that is, to inform your habits as a student.

3. *How do affective states (positive or negative) relate to students' perceptions of effort and performance?*

Affect precedes cognition. Students are very astute at identifying motivating or demotivating factors. In the next section I develop this idea further, but the respondents in this survey were pretty clear: Show me you care, and I will work hard for you – Show me you don't and I will hardly work for you. In this case it would be wise for all teachers to remember that affect precedes cognition.

Interest – Teacher Relationships

What is needed in our schools in order to ensure healthy minds, is healthy hearts. A culture of care must be in place if we are to expect students to do well in school. The student responses for effective versus ineffective teachers was almost entirely affective, summed up neatly by the question, "Will you care about me and my performance in school." If teachers don't care, or students don't perceive them to care, then I don't think we can expect much from them cognitively. All schools should develop a culture of care in order to ensure the emotional, physical and intellectual safety of all students.

4.   To what degree can students self-identify motivating or demotivating factors?

Effort – as relates to anxiety, depression and mental health

This study was not designed to explore the aspects of mental health among students, yet the topic came up nonetheless. More research is necessary to determine the ways in which students are affected in schools with mental health related issues. Further, what resources could provide the most information regarding the issue of mental health, including trauma-sensitive schools, the ACE (Adverse Childhood Experiences Study), etc.

Generation of New Theory:

Economy of effort theory.

See page 65.

Student engagement theory.

See page 58.

Chapter 6: Conclusions and Recommendations for Further Study

Recommendations for Further Study:

While I expected this study would not encompass all of my questions about student motivation, there were some aspects of this study that surprised me and I believe these warrant further study. The biggest surprise for me was the mental health concerns of the participants. Of only eight girls in the study, half self-reported issues related to mental health, particularly depression and anxiety. While only four of 18 participants total, these four represent exactly half of the female participants.

Given that half of the female participants in the study reported issues of mental health (despite the fact the interviews questions were only geared to motivation and never hinted at mental health) raises many questions for me as a researcher and as a practitioner. Having not included mental health in my literature review, I expect the literature is rich with answers to questions I have about mental health among school age children. But I expect, given the focus of my research, the literature is less abundant with regard to mental health and motivation, achievement, interest and effort.

In the area of mental health issues among school age children, I would encourage the development of the following questions:

1. Is there a correlation between mental health issues and motivation, interest, effort, goals, or achievement?

2. Are some students more likely to exhibit more mental health issues than others, such as students with certain personalities, goal orientations, introversion, extroversion, particular ethnicities, socio-economic status, parenting styles, or life circumstances or backgrounds?

3. Are pressures and stress of achievement related to mental health concerns?

4. Are students who are more likely to identify with performance goals (looking smart) as opposed to mastery goals (intrinsically motivated learning) more likely to develop mental health issues?

5. Are there any school environments that have been found to lessen the effects of mental health concerns, or dissolve them entirely, such as by developing more nurturing environments, better feedback systems (as opposed to grades), the presence of a counselor, advisory systems, smaller class sizes, smaller schools, parent volunteers, lower student-teacher ratios, or similar school structures?

6. How do teacher behaviors and school structures exacerbate mental health concerns, such as teacher-student interactions, student-student interactions, teacher feedback, grades, instructional styles, or teacher personalities?

The next set of suggestions for further research relate to the two theories that emerged during the findings of this study: Economy of Effort Theory, and the Theory of Student Engagement. Regarding the Economy of Effort Theory, my suggestions for further research include:

1. What factors would motivate students to apply themselves more on school work, or classes in general?

2. How can teachers use situational interest or other concepts to better construct or engineer learning opportunities that engage students at a deeper level?

3. What is the best way to educate teachers in the form of effective communication of student performance via continuous feedback? As noted in chapter five, grades are either used as feedback, or as a performance indicator, but in either case a single symbol such as

a letter grade without clear criteria for scoring and a dialogue about performance cannot be considered a best practice, yet the practice continues. Are there documented cases in which teachers have changed their practice from traditional grading systems to feedback systems beginning with clear performance criteria and ending with timely and informative discussions about student performance? This question is worthy of further research.

4. In general, how can teachers create more relevant opportunities for learning in the general classroom, and tap into concepts of student interest?

5. For teachers that have a hard time engaging students in coursework, is it due to not knowing how to engage students, or not caring to? In either case, what factors would convince teachers of the importance of engagement in the classroom, or encourage them to do so?

Conclusions and Recommendations for Practice:

Some of the results in this study confirmed my thinking and others surprised me. The confirmations of my thinking were still important as I believe they established a clear call for action in the classroom, and the surprises were important to give me more to think about as I continue to investigate these issues in education.

1. Teachers must commit to a culture of care.

Affect precedes cognition. Educators serve students because they care for the students, and it is essential that the students know that. Part of a culture of care means that teachers must know their learners well: where have they been, where are they going? What inspires them? What do they love or hope for? What do they find relevant, engaging or interesting? What are their goals? As a colleague of mine once said, õI canøt teach them if I canøt reach them.ö

2. Engineer environments for engagement and achievement.

As I mentioned in chapter one, we have an achievement gap to worry about, students are dropping out because school has no relevance, or they are bored or they have ₋learned₋ that they are failures. I would go a step further from saying we have an achievement gap and say we have an engagement gap. A high school dropout represents the antithesis of student engagement, and even students who don₋t drop out would likely achieve far more if they were engaged. We₋ve also seen the student who has an epiphany, one who gets it, or his or her heart is fired up at a new idea, and at that moment they know what they want to do with the rest of their life. The achievement gap is well known in America₋s schools, but if achievement is related to motivation, effort, engagement, interest, or relevance, perhaps we should be considering the engagement gap.

Teachers must know how to engage kids. Every participant in this study said that they work harder when they are interested, and they would be more interested if given a choice in what to study, and that school is not often relevant. That is a resounding alarm even for this small study. As reported by the students in this study, the simple introduction of student choice and autonomy in the classroom bolsters student interest.

3. Teachers must be standards-based, learner-centered and future-oriented.

There are many standards in education today; the most popular ones recently have been the emergence of the Common Core State Standards. These are important as they lay a foundation of what students must know and be able to do before entering society, and a clear example of the educational philosophy of essentialism at work.

Teachers must be learner-centered as we remind ourselves for whom we are working. A learner-centered classroom is rooted in engagement and relevant instruction. Finally, future-oriented means we are always looking ahead and preparing students to live in work in the world

of tomorrow by, for example, teaching 21st century skills. Our society is changing more quickly than ever. This year's kindergartners will graduate in 13 years, but we can hardly imagine what the world will look like in 3 to 5 years. They will likely need skills we cannot even imagine. It is for these reasons they will need a standards-based foundation, a learner-centered approach to instruction, and future-oriented plan for tomorrow.

Many teachers are often well-intentioned, but for many, their practices are the result of years of routine teaching experiences, hunches, or the occasional in-service or conference full of the trends I just mentioned. This is not the fault of the teachers, per se, as many other professions are abundant with opportunities for staff development opportunities, trainings, workshops, conferences, meetings, or simply a culture of collaboration that is indistinguishable from the job at hand. Anyone familiar with teaching, however, will instantly understand the challenge of collaboration in education because it is impossible when students are in the building, and there isn't much time before or after the school day. For many educators, professional development and collaboration are distant possibilities.

Teachers are also not often known to be entrepreneurial in nature, at least as a profession. A recent study by Startup Founders on LinkedIn ranked education among the least entrepreneurial professions along with nursing, human resources, social work and theology (Rogati, 2011). The study explained that, by contrast, the most entrepreneurial majors were entrepreneurship, computer engineering, computer science, electrical engineering and physics as entrepreneurs find themselves in engineering, informational technology and similar fast paced pursuits. But education today requires change agents, people who think differently about their craft. There are problems to be solved and opportunities to be addressed in the field of

education. There is no doubt that teachers are widely regarded as caring public servants but innovation isn't usually a term people associate with teachers. My question is "why?"

There is work to be done in education, and it requires the thinking of insiders as well as outsiders. Currently there is a great deal of pressure on schools to change from the outside, but on the inside everything seems cozy and safe and free from change. With the exception of more computers in classrooms, many school systems do not appear to have changed for decades. Again, my question is "why?"

I do not know if teachers are resistant to change, don't know how to change, or aren't sure why they need to. Anyone who has seen society change dramatically in the last 10 years should sense the urgency for schools to keep pace with an ever changing society, one that schools are often trying to keep out. Currently, a typical teacher response to students having cell phones in class is to confiscate them when, instead, teachers could be teaching the appropriate use of cell phones in daily applications. One cannot embrace (or even accommodate) change while shutting it out completely and adhering to yesterday's practices.

I do not know whether teachers are resistant to change, or just unaware of the need for it. Teachers may be more resistant to change or less innovative than people in other professions. I frequently wonder what a school would look like, for example, if designed by Google. But I don't expect I could rely on most teachers to answer that for me. I wonder what our schools would look like if they were conceived of in the agrarian revolution, or the information revolution, as opposed to the industrial revolution. Perhaps instead of factories they may resemble gardens, or computer applications with clear and logical purposes. I wonder what our schools would look like if we examined the role of the teacher and the school through metaphor, such as master gardener, engineer, facilitator, economist, psychologist, coach or cheerleader.

I wonder these things because school seems largely the same as it did nearly 20 years ago when I began teaching, and nearly 30 years ago when I was in middle school. The difference was that the computers in my classroom then had green monitors and didnøt talk to each other. But we still sat in rows facing forward, listened to the teacher, didnøt speak without permission, did the work assigned, wrote essays, endured worksheets, and waited intently for the bell to ring at the end of the day. It is a wonder I entered education.

We are speeding into the unknown future faster than ever. By committing to a culture of care, we must consider the whole child and engineer opportunities for engagement so each student may embrace the world that awaits them on the horizon with the skills necessary to succeed. My fear is that there are too few educators in the profession who understand this urgency to change. Too many seem to look to the past for the answers they seek instead of the future, if they seek answers at all. Perhaps the biggest obstacle to student engagement is the lack of teacher engagement ó which may be the most important recommendation for future research to emerge from this study, that the heart of the matter is a matter of heart.

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APPENDICES

Appendix A: Letter of Consent

Dear Parent or Guardian,

You already know me to some degree as your child's middle school principal, Mr. Marc Simmons. What you may not know about me is that I am also pursuing my doctorate through George Fox University. For several years I have been studying motivation to discover what drives students to achieve in school. My years of study have led me to this culminating point in which I must conduct original research that investigates an issue in education today. The issue I have chosen is student perceptions of their own motivation in school.

My research requires me to interview approximately 20 middle school students to determine how they perceive school and their own achievement. I would like to invite your child to participate in this study. Participation in this study would mean a 30 minute interview with your child to ask them their opinions about school, grades, effort, achievement, distractions, and goals. Upon interviewing 20 students, certain themes will emerge that will tell me more about how students feel about school, that we may then use to be able to improve school by helping teachers understand what motivates students to perform better.

Assurances of the study:
If your student participates in the study all information between your child and me will be kept confidential, and all rights to privacy will be upheld. All data will be presented with pseudonyms; therefore, no individual data will be personally identifiable to anyone but me at any time. The completed questionnaires will be stored in a locked file cabinet; the personal interviews will be recorded and then transcribed. All relevant materials will be destroyed three years from the date the research is completed.

This study is considered a low-risk study because it is comprised solely of a questionnaire and one-on-one interview about your child's perceptions of school. The interview questions are also included on the back of this form for your perusal.

Benefits of the study:
The findings of my study will provide greater insight into what motivates students to achieve in school, and what obstacles or distractions discourage motivation in the first place. Students who participate in the study will have the opportunity to share their experiences with me and I will present the findings of these experiences back to the participants and parents of the study, as well as the school district. In addition to presenting locally, my hope is to present my findings to the broader educational community.

Thank you for your willingness to consider allowing your child to participate in this study. Should you choose to participate, you and your child's participation will be making a valuable contribution to research in student motivation and achievement. If you have any questions regarding my research you may email me at msimmons09@georgefox.edu or call me on my cell phone at (360)244-3182. If you would like to speak with my dissertation chairperson, you may reach Dr. Gary Tiffin by email at gtiffin@georgefox.edu or by phone at (503)554-2843.

Thank you for your time and attention,

Marc Simmons
Principal, Ilwaco Middle School

If you understand the potential uses of my research and agree to participate, please sign below and return to me at Ilwaco Middle School.

Parent Printed Name: _____ Date: _____

Parent Signature: _____

Student Printed Name: _____ Date: _____

Student Signature: _____

Appendix B: Interview Questions

1. **Affect/Interest**
   1.1. In general, what are your thoughts about school?
   1.2. Do you find school interesting? Why or why not?
      1.2.1. What parts of school do you like, or find interesting?
      1.2.2. What parts of school do you not like, or find boring?
   1.3. What kinds of things would make school more interesting? Why? Explain.
   1.4. What do you do when work is boring? What keeps you hanging in there until your work is done? How do you stay interested?

2. **Competence/Self-Perceptions**
   2.1. Do you do well in school? Why or why not?
      2.1.1. If so, is it because you try hard, or are naturally talented, or both? Explain.
      2.1.2. If not, do you try hard? Why or why not?
   2.2. What parts do you do better in and why?
      2.2.1. Are you good at these parts because they interest you?
   2.3. Which parts do you do worse in and why?
      2.3.1. Are you not good at these parts because they don¢t interest you?
   2.4. Do you try harder when work is interesting? Why or why not?
   2.5. Do you do well at anything you are not interested in? If so, what?
   2.6. Do you do poorly in anything you are interested in? If so, what?
   2.7. What could you do to perform better in school?

3. **Goal Orientations**
   3.1. Do you want to do well in school? If so, why? If not, why not?
      3.1.1. If so, what kinds of things motivate you to do well in school?
      3.1.2. If not, what kinds of things would motivate you to do well in school?
   3.2. What are your goals in school? What do you want to accomplish? Why is that important to you?

4. **Social Elements**
   4.1. How well do you do in school compared to your peers?
      4.1.1. How does this make you feel?
   4.2. How hard do you try compared to your peers?
      4.2.1. If harder, why? If not as hard, why?
   4.3. Is it important for you to do better than your classmates, or does that matter? Why?
   4.4. What kinds of things do teachers do that make you want to try harder?
   4.5. What kinds of things do teachers do that keep you from wanting to try hard, or not try at all?

5. **Effort/Willpower/Self-Regulation**
   5.1. How hard do you try at school? Explain.
   5.2. Under what circumstances do you work hard at school?
      5.2.1. In these cases, what circumstances would make you work even harder?
   5.3. Under what circumstances do you not work hard at school?
      5.3.1. In these cases, what circumstances would make you try harder?
   5.4. Do you ever give up easily?
      5.4.1. If so, why? Under what circumstances?
      5.4.2. If not, what keeps you hanging in there?