Examining and addressing academic stress at a suburban high school

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EXAMINING AND ADDRESSING ACADEMIC STRESS
AT A SUBURBAN HIGH SCHOOL

Dissertation
By
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Submitted in partial fulfillment
of the requirements for the degree of
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ABSTRACT

Examining and Addressing Academic Stress
at a Suburban High School

by

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This qualitative case study focused on what the researcher learned as a participant-observer during the planning and implementation stages of the Stress Reduction Committee’s work to examine and address an academic stress problem at Jewel-on-the-Hill High School. The observations illuminated the various perspectives individuals carried on the naming of the stress problem, how they overcame challenges in the work, the new learnings they developed, and the results the initiative created. The study examined the scope and complexity of the stress issue, the importance of distributed leadership and coordinated school change, and the challenges of shifting the culture of a school.

Five instruments were utilized to collect data in this ethnographic descriptive case study: pre-intervention interviews, participant reflective journaling, results of the Stress Reduction Committee, researcher reflective journaling, and post-intervention interviews. The researcher collected data over the course of a fourteen-month period.

Findings were many, and included how there existed differences and consistencies both within the sample and between subsamples. The influence of time on
the initiative and the study produced additional findings. Themes developed across each of the first three research questions (the naming of the stress problem, the challenges the committee faced, and the new learnings of the committee). The role and actions taken by the participant-observer as he led the stress initiative provided additional findings.

Implications for practice included advice for school leaders in taking on a school culture initiative, such as how to best lead a representative committee and how to organize the fruitful outputs of the group. Advice was also provided to parents and to students on how to best cope with academic stress and increase their locus of control over their life situation.

Limitations of this study included potential leadership bias due to the researcher’s role as principal of the school. Other limitations included site, time, and instrumentation biases. The researcher made efforts to control for biases in order to increase the validity and reliability of the study.

The dissertation concluded with the lessons learned by the participant-observer in regards to his own leadership capacity. The study and initiative led to substantial professional growth for the researcher.
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Chapter One

Overview of the Study

I. Introduction

There is a constant pressure to do really well and live up to the community’s expectations.

- Student from Jewel-on-the-Hill High School

Jewel-on-the-Hill High School (fictitious name) has an entrenched culture of academic achievement that is both valued and perpetuated by the school and community. However, there exists serious cause for concern. Like many other affluent suburban schools in the country, Jewel-on-the-Hill High School (JHS) has a significant number of students who report being overburdened by academic stress. This stress may manifest itself in a variety of ways, including unhappiness, cheating, perfectionist tendencies, disengagement from school, and a compromised learning and growth experience (Pope, 2001). Most alarmingly, stress appears to have a tangible impact on the physical and mental well being of JHS’ students. Marilee Jones (2006), formerly of MIT, believes stress has created “the most anxious, stressed, sleep-deprived generation ever.”

Stress has traditionally been viewed as a requisite part of adolescent development and of the high school experience, a phenomenon in which youth have generally been resilient to; “good” stress (eustress) has helped students grow through meeting new challenges and gain confidence that they can rebound from disappointing experiences (resiliency). Many high schoolers from this newest generation, however, appear to be in crisis. Due to chronic stress (distress), experts worry that the current culture driving
students to be perfect at everything, participate in scores of extracurricular activities to beef up college applications, earn the highest grades in the most advanced classes, and ultimately gain acceptance to the most exclusive and “name-brand” colleges, has eroded the natural resilience youth has had over time (Jones, 2006). Confidence is fragile, fleeting, and not based on competence (Ginsburg & Jablow, 2006).

Academic stress is not a problem for all students, but it appears to be the case for many. Students who report having chronic stress identify a variety of sources—parents, students, college admissions, peers, school, themselves, and popular culture (Jewel-on-the-Hill Stress Survey Analysis, 2006). The college admissions process is the tail that wags the dog for college preparatory schools like Jewel-on-the-Hill. It is the single biggest driving force in how students choose their coursework and extra-curricular activities. The most competitive colleges and universities become complicit in the stress problem when they purport looking for students who are “authentic”, who act true to their interests and passions (Poch, 2007), yet have also challenged themselves by taking the most rigorous high school schedule available to them, as well as be involved in several extra-curricular activities and community service experiences. Many students interpret this mixed message by taking a maximum number of Advanced Placement courses, adding a few more activities to their busy lives, and doing service that is unique, so it will set them apart from their peers.

Popular media can supply a message that adolescents today need to be superhuman students and near perfect. This message is often directed at parents. Boston Magazine placed on its September, 2007 cover the following subtitle:
Gotta start 'em young! Why it's never too early to stress about your child's education....Plus: The hub's top preschools.

Parents in the JHS community mean well and want the best for their children. However, they too feel enormous pressure to ensure their children’s success—which often means getting them into the right college—and many hover over their children’s school waiting to advocate for their child’s needs or wants. Micromanaging the high school experience appears to be the norm and the definition of “good parenting”, but it is unclear what this usurping of control will have on the development of their children.

Parents can help address their children cope with stress by providing unconditional love and support through the inevitable ups and downs of the high school experience, by helping their children take a mastery approach to learning (rather than a performance approach), and by giving them space to learn from mistakes and work through their problems with support and guidance rather than direct intervention.

Schools like JHS feel pressure to produce results in a national accountability climate that ranks schools based on standardized test scores. Increasingly, taxpayers demand a tangible return—i.e. academic performance and stellar school reputation—for their investment in their high-priced homes. As schools grapple with exciting new research on best pedagogies, they often do so within a context of increased centralization, decreased funding, and with teachers and administrators stretched to their limits. For schools, the primary concern with stress lies in its students’ disengagement from learning for mastery, students’ hyper-concern about grades and awards, and a pervasive occurrence of cheating and plagiarism.
Schools can help address stress by engaging its students in meaningful tasks and developing caring and supportive adult-student relationships. Schools also can minimize its hypocritical practices that contribute to chronic stress. This typically involves schools examining its homework practices, how it celebrates academic achievement, how it helps parents navigate the college admissions process, and whether structures exist in the school that inadvertently exacerbate stress.

Ultimately, however, the onus of the stress problem rests primarily on the students themselves. Students report that they can be their worst enemies with the choices they make, the pressure they put on themselves by competing with peers, and by fostering perfectionist tendencies. Emphasis can be placed on helping students gain a better *locus of control* over their decisions and how they cope with stress. Encouragingly, students can develop competency in mitigating symptoms of stress. In addition, increasing students’ social and emotional competencies (such as problem solving) may lower stress.

Many people feel an urgency to examine and address the stress problem. Middle school students report alarming stress levels and symptoms, just as high school aged students have (Pope, 2007). Elite colleges have seen a dramatic rise in students *starting* clubs (rather than joining established groups), which has been partly blamed on students' desire to pad their resumes with leadership experiences (Wertheimer, 2007). Employers report receiving phone calls from parents of their adult employees looking to intervene in problems at work (Maloney, 2007). This trend appears to be escalating and is pervasive.

Parents, schools, and students each own a significant piece of both the stress problem and its solution. This study examined Jewel-on-the-Hill High School’s efforts to
address academic stress through its Stress Reduction Committee (SRC): what it learned, what challenges it faced, and what actions it took to improve the school’s climate. At the time of this study, JHS was one of a handful of schools outside of California connected to Stanford University’s Stressed Out Students (SOS) project. This relationship, as well as partnerships with the Benson-Henry Institute for Mind-Body Medicine, and with educators, parents, and students around the country, greatly influenced the school’s work and this study.

II. Focus of the Study

“Examining and addressing academic stress at a suburban high school” was an ethnographic descriptive case study. The qualitative study focused on what the researcher learned as participant-observer during the planning stages of the SRC’s work—he was also principal of the school. The observations illuminated the various perspectives individuals brought to the stress problem through a series of comparisons and contrasts. The study examined the scope and complexity of the issues, the importance of distributing leadership when coordinating school change, and the challenges of shifting the culture of a school.

The school setting, particularly high schools, has long been seen as a difficult place to exert lasting change (Sarason, 1971). Deal and Peterson (1994) identified three stages of the change process—planning, implementation, and institutionalization—with

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1 It started with a visit in May, 2005 by the researcher. He has since returned three times to Stanford. In 2008, the project was renamed “Challenge Success”. 
the latter being the most difficult to achieve. How well a principal develops new
relationships, builds coherence, and understands the change process can determine how
enduring change will be (Fullan, 2002). In addition, specific competencies have been
identified for leaders who have facilitated effective change, such as how to emphasize
learning, how to involve people in decision making, how to foster trust, and how to
“know one’s self” (Sergiovanni, 2007).

This study was primarily about the work of a group of individuals motivated to
work together to improve a school culture. But it was also about the approaches the
principal chose and the progress he made in leading this group in the planning and
implementation stages of the change process. The study allowed the researcher to reflect
on his leadership style and the competencies he developed in attempting to improve the
educational experience of young people.

III. The Leadership Project

In spring, 2007 Jewel-on-the-Hill High School established a representative group
to respond to concerns over chronic academic stress: the Stress Reduction Committee.
The group of sixteen students, parents, teachers, and the principal met as often as twice
monthly to discuss various issues germane to the stress problem, to gain a better
understanding of the problem, and to recommend actions to implement. It was able to
learn from its mistakes and build upon its successes. Professional literature and locally-
collected data, as well as anecdotal perspectives, drove the SRC’s decision making. The
researcher led this initiative since its inception and facilitated the initial student stress
The purpose of the Stress Reduction Committee was to explore, analyze, and make recommendations for action to address academic-based stress at Jewel-on-the-Hill High School. Its shared vision was to move students away from unhealthy stress-coping behaviors toward healthy stress-management techniques by fostering students’ self-awareness and mindset, building students’ internal controls, fully engaging students in learning, partnering with parents in positive ways, and by reducing external stressors.

Student voice was central to the initiative and was promoted in several ways: through “testimonials”, active participation on the Committee, active participation in implementing Action Plans, and by allowing students to voice their opinions in various forums.

The SRC worked toward meeting six primary goals:

1. Provide students the skills and capacity to allow them to better manage their stress and that of their peers.

2. Help students foster self-awareness and build other skills to cultivate resiliency, help them find meaning in their studies, and help them develop a more holistic definition of success.

3. Educate parents so they can better support their child’s health, learning, and happiness.

4. Make recommendations to address school or district practices that contribute negatively to student stress while maintaining Jewel-on-the-Hill’s high expectations and standards.

5. Build awareness and empathy in the school community.
6. Create an infrastructure to implement and institutionalize strategies to meet the aforementioned goals.

In its tenure, the Stress Reduction Committee accomplished some simple gains (e.g. educational outreach via parent assemblies), was periodically showered with praise from the media (November, 2007 front-page story in The New York Times), and met a significant degree of faculty resistance on whether the initiative was both warranted and educationally sound. The SRC focused its actions on the various challenges and needs that presented itself. The Committee’s processes and decision making provided important pieces of analysis for this study.

IV. Research Questions

The study attempted to answer four research questions as the Stress Reduction Committee completed its beginning efforts to examine and address the student stress problem:

1. How did the Stress Reduction Committee analyze and name the student stress problem?

2. What were the challenges encountered by the faculty, parent, and student members of the Committee during its work on the student stress problem?

3. What were the new learnings of the Committee during its work on the student stress problem?

4. What were the school-wide results of the planning phase of the project?
The study examined the extent that members of the SRC believed academic stress as a problem that negatively impacted both health and learning for students, including how specific subgroups (parents, students, faculty) defined the stress problem. The study identified specific stressors (i.e. causes) as well as perceived symptoms of the problem (e.g. sleep deprivation). The study observed the steering process the SRC took to make sense of the issues and develop actions to address the problem.

The challenges the SRC faced provided an opportunity for study. This included examining the tension when advocacy for social and emotional learning competed with a traditional definition of academic rigor. The effects of stress on an individual are relative to his or her perception of a “threat”, as well as his or her ability to access coping strategies, which differ depending on the person’s personality and coping repertoire; the Committee needed to grapple with the needs of its most and least achieving students.

The learnings generated from the change initiative provided for rich analysis in this study. The Committee made decisions on how to act based on data it collected, research it considered, and through reflecting on its actions, all in the effort to meet its six goals. The communication strategies within the group as well as the SRC’s outreach to the Jewel-on-the-Hill community were studied. Data on these learnings came from both observations by the researcher as well as from interviews and journaling by the study’s participants.

The SRC aimed to produce results. The processes the group utilized to plan and generate action plans, and then how it assessed its effectiveness were important items to the case study. The Committee decided where and how to concentrate its efforts. The
study described why the SRC chose to do what it did and to what effect. The study was bounded by a time period of fifteen months, and was not able to measure steps toward “institutionalizing” the changes.

V. Theoretical Landscape

Academic stress topics relevant to this study such as homework, sleep, and student engagement in learning have been researched widely and in depth. However, other facets of the problem have yet to be substantially examined. Little, if any, empirical research has correlated specific academic stressors—such as homework—to student stress in the high school setting. The Review of Related Literature (chapter two) will highlight both the abundance and paucity of research available, as well as limitations inherent in the studies that make up the theoretical landscape of the study.

The theoretical landscape is broken into three areas: (1) leadership and change in the school setting; (2) school-based student stress: effects on students, manifestations in the school setting, and stressors; and (3) stress management and coping strategies.

The first and most comprehensive area of the theoretical rationale is derived from the widely researched field of school change. Today’s context of school reform necessitates moving beyond the “follow-me” type of leadership and instead calls for distributed leadership. When groups work together to improve teaching and learning, specific approaches are favored. The identification and meeting of the challenges associated with committee work provided an important influence on this study. Change initiatives often involve work on school culture, which in turn requires the organization to
A systemic approach to reculturing formed a key piece of the review of relevant literature.

The student perspective was paramount to all other viewpoints in the Stress Reduction Committee’s initiative and is represented in the first part of the theoretical landscape. Schools are generally not accustomed to incorporating “student voice” into its decision-making process in meaningful ways; the student perspective is considered an untapped resource. In examining the stress problem, students often offer the best remedies to their struggles. Focus groups and surveys can identify gender or age differences in the students’ stress as well as which stressors are relevant (Galloway, Pope, and Osberg, 2007).

The first area of the theoretical rationale ends with a review of communication. The educational outreach from the Committee to its stakeholders needed special attention. In some cases, messages and advice that came from the SRC was perceived as a threat to the cherished culture of high achievement. For example, a message to parents about taking caution with scheduling children with more advanced courses than they can handle could conflict with the parents’ wish to keep their children competitive for admission to an elite college. The way messages were delivered, with special attention to the wording, was important for the Committee to consider (Tracy & Ashcraft, 2001). The SRC risked losing cooperation critical to the initiative if it did not give communication strategic attention. Using newsletters and other communications, fostering trust, being positive, and having purposeful meetings can all contribute to successful reform efforts (Hensley and Burmeister, 2004).
The review of relevant literature will transition into an overview of the stress problem and the culture that has facilitated it, including the historical context of the study of stress (which derives from medical research). The stress problem can have a profound effect on the physical and psychological well being of adolescents and can also truncate memory. This effect translates into behaviors that are widely believed to be associated with chronic stress, which may include:

- perfectionist traits
- motivation toward performance and extrinsic rewards
- cheating and academic dishonesty
- sleep deprivation
- “future orientation” toward monetary success
- diminished happiness
- “learned helplessness”

In the face of such distressing behaviors, one naturally turns to causes. As mentioned previously, little scientific data points to a causal relationship between certain stressors and unhealthy behaviors. However, some variables—rooted at home, school, and in the self—were worth reviewing to hypothesize its effect. These variables included:

- expectations parents set and the messages they give toward achievement and success
- “over-scheduling” extra-curricular activities
- the influence of the college admissions process
- grades, awards, rewards, and other extrinsic motivators
personal technology
- homework
- disengaging curriculum and instruction
- sorting, tracking, and labeling

The third component of the theoretical rationale centers on an individual’s capacity to respond when feeling stressed. The medical and psychological fields offer an abundance of resources, strategies, and approaches to how students can lower their stress levels, improve their health, and rebound when life throws them a challenge (often referred to as resiliency). Many of these skills—such as the importance of self-efficacy (Levine, 2006)—fall into the realm of social and emotional learning (SEL). SEL gets frequent attention at the elementary and middle school levels but continues to be discredited or marginalized in many high school settings (where, ironically, once can argue students need these skills the most).

VI. Significance of the Study

Academic stress is an issue many schools, parents, and educators appear to have turned a blind eye toward; the subject is taboo in America’s schools. At a benign level, some people sympathize with today’s youth but view stress as an unfortunate consequence of achievement, something necessary to endure in order to survive in today’s competitive and increasingly global society. At a more dangerous level, outright denial has set in (among disturbing evidence that a growing number of youth are
suffering from serious medical issues caused by chronic stress, which in turn inhibits learning).

This study provides a warning of the harmful consequences for youth if the current trend continues. It puts into context many issues that have drawn media attention and made books such as Madeline Levine’s *Price of Privilege* so popular. It attempts to connect the diverse set of variables at play in the stress problem and suggest solutions to address the needs of adolescents.

There is a growing body of research, albeit incomplete, about stress in the educational setting. The researcher found no case studies that have studied stress in the general high school context (other dissertations have focused on at-risk groups or specific cohorts of students at the post-secondary level). The author offers schools wishing to grapple with the stress problem a framework to guide its work and a source of insight into the successes and failures of the Stress Reduction Committee. The study suggests new areas for educational research, particularly with the relationship between specific stressors and concerning behaviors in the high school setting.

VII. Research Design

A case study design was utilized in this study. In doing so, the researcher gained a deep understanding of the student stress problem in the particular context of the high school environment. Merriam (1998, p. 41) offers the case study as “a means of investigating complex social units consisting of multiple variables of potential importance in understanding the environment.” This style of qualitative research also
requires a bounded system (Merriam, 1998). In this case, data collection took place entirely within the context of Jewel-on-the-Hill High School and over the course of a fifteen-month period.

Three participant sub-groups existed: parents, students, and teachers. This allowed for both within-case and cross-case analyses, where useful. In this study, the participant-observer looked at similarities and differences, themes and connections, as well as examining other variables, to build what Yin (1994, p. 112) calls “a general explanation that fits each of the individual cases, even though the cases will vary in their details.” In doing so, the researcher developed more influential descriptions of the context at hand (Merriam, 1998).

Five instruments were used to collect data in this qualitative case study: pre-intervention interviews, participant reflective journaling, results of the Stress Reduction Committee, researcher reflective journaling, and post-intervention interviews. The participants’ interviews and journaling provided insights into their initial understandings of the student stress problem and how their perspectives changed over time (helping to answer the first three research questions). The Committee produced “results” in the form of minutes, documents, actions, and recommendations to the administration that collected data for the first and fourth research questions. Finally, the researcher’s observations as the leader of the Committee provided an additional perspective into each of the four research questions. These data collection instruments provided triangulation to foster the study’s internal validity (Merriam, 1998). In addition, the data allowed for the refinement of the theoretical landscape of the project and study.
The researcher began an analysis by organizing the data in an efficient and effective way. Miles and Huberman (1994, p.10) define *analysis* as “consisting of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification.” These tasks began at the start of the data collection period and continued throughout the process. Data was coded and findings were displayed in a series of tables, organized by the variables.

**VIII. Limitations of the Study**

The researcher was mindful of the limitations and biases inherent in this study. When discussing these issues, the concepts of reliability and validity were addressed. These two concepts got to the quality of the research study and whether its results could be believable, were accurate, and could be reasonably applied to similar settings. The very nature of qualitative research precludes the generalization of results to other schools or contexts (Miles and Huberman, 1994).

*Researcher bias* had perhaps the greatest influence on this study because of the researcher’s role as both participant-observer and leader of the Stress Reduction Committee (and principal of the school). Other potential biases that were considered and addressed included *single site, unique site* (including size of school), *sample size, instrumentation,* and *time*. Chapter three of this dissertation provides a description of these concerns as well as steps taken by the researcher to minimize the biases’ threat to reliability and validity.
IX. Definitions of Terms

The following are several terms that will appear in this study:

**Action Plans** were used by the Stress Reduction Committee when it decided to implement plans to address a component of the stress problem (e.g. a revision of the school’s Ethics Policy). A specific template was used to generate these actions.

**Advanced Placement (AP)** courses are college-level curricula that many high schools include in its Program of Studies. The standardized AP curriculum derives from the College Board organization and lead students toward an exam. Many universities grant exemptions or credits to incoming students who achieve a benchmark on the exam. Taking AP courses in high school can provide students a unique learning challenge. Others have criticized the AP program because many of the most competitive colleges implicitly encourage students to take a maximum number of AP courses at their high school.

**Initiative** describes the school improvement work of the Stress Reduction Committee.

**Topic Frameworks** were used by the Stress Reduction Committee to research topics relevant to the stress problem. The student, teacher, and parent perspectives were considered, as well as current research. All this leads to a recommendation of an action plan.
X. Overview of the Study

Chapter one provides an overview of the study. It introduces the reader to the academic stress problem and the context in which it takes place. The chapter describes what the study is about, the research questions, and how the researcher treats and analyzes data. The theoretical rationale portion of the chapter summarizes what the researcher expected to find through interpretive frameworks derived from a literature review. It gives the reader a sufficient background to tackle the detail found in subsequent chapters.

Chapter two is a comprehensive review of existing research relevant to the theoretical landscape of the study. Theories and models are reviewed as well as specific topics related to the academic stress problem. This chapter speaks to the literature that has influenced the direction and design of the study.

Chapter three describes the overall research design of the study. It explains the research methodologies used and the rationale for doing so. It describes in detail the sample from which the data was collected and specific techniques deemed important to the case study design. Methods of data analysis and how the data was organized and reported are also part of this chapter.

Chapter four presents the findings of the case study. The findings are described in narrative and descriptive display formats and derive from the researchers observations, interviews, and other data collection instruments. It takes place in the context of the theoretical landscape and the study’s research questions.
Chapter five summarizes the findings and includes the researcher’s conclusions about the study, again through the lens of relevant literature. It includes recommendations for schools participating in similar initiatives, a review of potential biases to the study, leadership lessons learned by the researcher, and suggestions for areas of future research.
Chapter Two

Review of Related Literature

I. Introduction

This chapter consists of a review of related literature—both research- and theory-based writing—that relate to the stress topics under study. The theoretical landscape is broken into three components: (1) leadership and change in the school setting; (2) school-based student stress: effects on students, manifestations in the school setting, and stressors; and (3) stress management and coping strategies.

Each section includes those studies and authors most relevant to the study and why that is the case—remaining mindful of the four research questions:

(1) How did the Stress Reduction Committee analyze and name the student stress problem?

(2) What were the challenges encountered by the faculty, parent, and student members of the committee during its work?

(3) What were the new learnings of the committee during its work?

(4) What were the school-wide results of the initial phase of the Project?

Chapter two concludes with a discussion of the major influences on this study as well as a lead in to the research design outlined in chapter three.
II. Leadership and Change in the School Setting

Leadership

Leadership arouses passion.

- Ronald Heifitz

If you can’t stand the heat, get out of the kitchen.

- Harry S. Truman

Today’s landscape

The last two decades have been marked by a significant increase in school-based accountability for student learning. Elmore (2005) sees this change as a consequence of performance-based accountability through policies that evaluate, reward, and sanction schools on the basis of measured student performance. The changing landscape has modified the role of school leaders (particularly principals) from a predominantly managerial function to the person providing the general academic direction for the school.

State and federal policy makers tend to characterize schools as places that simply need to comply or implement new accountability measures. Ratcheting up the consequences when external performance standards are not met, often through sanctions, can impede the effectiveness of those individuals most influential on student achievement—i.e. teachers. Elmore (2005) identifies school improvement as both a technical and social-emotion process, one that requires an organizational response to external demands. This presents a unique challenge to school leaders to distribute leadership while stressing the importance of agency—as a school and individually.
School leaders may be able to change the thinking and actions of some individuals simply through missionary zeal or charisma, but schools are places of traditions, dynamics, and competing goals, and thus require a collective effort toward improvement. As a result, the leader considers the scope of the change through a time perspective, as well as ways to distribute knowledge (Sarason, 1971).

Sergiovanni (2005) offers that the standard prescription for “follow me” leadership falls significantly short in the complex, disconnected, and often chaotic world of today’s school setting. Leadership for change requires moving beyond an assumption that direct leadership can exert whole school improvement by searching for pre-determined solutions for the problems schools face. Sergiovanni (2001) instead asks leaders to “think amoeba” to understand the nature of administrative work:

Running the school is like trying to get a giant amoeba to move from one side of the street to another. As the “glob” slips off the curb onto the street and begins its meandering journey, the job of the leader is to figure out how to keep it together, while trying to move it in the general direction of the other side. This involves pulling here, pushing there, patching holes, supporting thin parts, and breaking up logjams. (p. 7)

Changing culture

Deep-reaching school improvement efforts in today’s landscape require a focus on culture, which is fundamentally large in scope, complex by nature, and requires
considerable time to impact. Fullan (2002) points to five components that characterize the leadership during culture work (referred by Fullan as “reculturing”):

- **Moral purpose**: a social responsibility to make a difference in the lives of students.
- **Understanding change**: having the best ideas is not enough. A collective meaning and commitment to new ideas is essential.
- **Improving relationships**: leaders build relationships with diverse people and groups, which can bring them through difficult times.
- **Knowledge creation and sharing**: endorsing continual learning among adults and groups.
- **Coherence making**: leaders keep student learning as the central focus amid a swirl of new ideas and information.

Change theory establishes the complexity of moving a school culture, the nature of which requires whole-group involvement and carefully crafted leadership decisions. Heifitz (1994) provides a useful lens to see the challenge of mobilizing people to tackle tough problems. He defines *adaptive work* as “the learning required to address conflicts in the values people hold, or to diminish the gap between the values people stand for and the reality they face (p. 22).” Adaptive work requires a change in values, beliefs, or behaviors.

Heifitz (1994) breaks problems into three types:

- **Type I**: The authority figure is depended on the use routine solutions (technical) to known problems.
- **Type II**: The problem is clear, but adaptive work is required by both the authority figure and others to find solutions.

- **Type III**: The problem is not clear and requires learning as well as the adaptive work needed for a solution.

Culture work falls into the third and most complex type. The principal uses his or her authority to guide learning within the school community. This involves keeping attention focused on relevant issues, granting access to critical information, regulating levels of distress and orchestrating conflict, framing issues, choosing the decision making processes, and breaking down components of the problem into less complex Type I and Type II items (when feasible) (Heifitz, 1994).

Because the *authority* leaders possess can sometimes act as a constraint (e.g. needing to answer to various constituencies), leaders *without authority*—but possessing strong bonds of trust with others—can exercise significant influence on adaptive work. Leading without authority provides the unique benefits of front-line knowledge, creative deviance, and issue focus. School principals may decide to empower such leadership and do so by “giving the work back to the people.” (Heifitz, 1994) This concept supports Elmore’s belief that school improvement requires organizational change. Whether leadership is exhibited by those with authority or those without, adaptive work aligns the values, beliefs, and assumptions of the school community and can produce the type of positive school culture that leads to improved teaching and learning (Heifitz, 1994).
Senge’s systems thinking

Leaders embarking on effective and lasting school change in the current landscape must do more than just distribute leadership and foster participation. It requires a particular mindset. *Systems thinking*, referred by Senge (2006) as “the fifth discipline”, debunks the myth that the world is created of separate, unrelated forces. Systems thinking is a discipline of seeing “wholes”: the interrelationships between variables and the processes of change (Senge, 2006). It represents a distinct approach to navigating the stages of change and offers four components: personal mastery, mental models, shared vision, and team learning.

Personal mastery is founded on the belief that organizations can only learn if it is made up of individuals who learn. A leader who cultivates personal mastery for himself or herself, and also for others, continually clarifies what is most important as well as learning how to see the current reality more clearly. Personal mastery’s central principle is the nurturing of “creative tension”—the juxtaposition of vision and current reality. The leader models this concept by embracing the challenges of change, being deeply inquisitive, testing reality, and continually focusing and refocusing one’s vision; personal mastery cannot be forced onto others. Leading via the fifth discipline integrates reason and intuition toward a commitment to the whole and connectedness to others (Senge, 2006).

The assumptions leaders make—i.e. mental models—affect the decisions they make. Mental models are deeply held internal images of how one believes the world works. It creates limits on the way one thinks and acts. As a result, the leader builds the
organization’s capacity to surface and test mental models through providing tools and infrastructures that promote awareness and reflective skills, and by creating a culture that promotes inquiry and challenges the organization’s thinking (Senge, 2006).

Schools doing reculturing move toward a shared vision. A vision is truly shared when individuals share a similar picture and build commitment through connections with each other in the organization. Shared visions build strength through a strong sense of caring and are not merely solutions to a problem. Instead, a shared vision unifies people toward the pursuit of a larger purpose. It provides focus and energy for generative learning and compels courage and fosters risk taking. Most importantly, a shared vision creates commitment (not just compliance) to the long-term improvement of an organization (Senge, 2006).

Schools intent on building shared visions encourage its faculty to develop their personal visions. Vision, like personal mastery, cannot be forced onto others. Leaders openly share their personal visions and ask, “Will you follow me?” They also give shared visions time to develop and emerge, time for them to grow as a by-product of people listening to each other. As people talk, enthusiasm and commitment grow (Senge, 2006).

Cohesive groups can have its limitations, however. Even when a group leader in a safe and supportive environment earnestly asks for the opinions of others, these members can prevent each other from fully expressing doubts about discussion points or asking critical questions. Janis (1982) coined this constraining force as “groupthink”. It derives from people’s natural social tendency, while in groups, to focus immediate attention on the individual raising a challenge rather than on the issue itself. Typically, these
individuals are pressured to “get back in line” to restore group unity and congeniality. The consequences can be severe, resulting in mindless conformity and collective misjudgment of serious risks. Groupthink “refers to a deterioration of mental efficiency, reality testing, and moral judgment that results from in-group pressures.” (Janis, 1982, p. 9)

Groups can avoid groupthink by carefully constructing its membership. Janis (1982) believes that the more amiable and congenial individuals are within a group, the greater the danger that independent critical thinking will be replaced by groupthink. He offers three remedies to prevent the undesirable side effects of working in groups to solve complex problems:

- Create the group norm that each member should fill the role of critical evaluator to ideas that are presented. High priority should be given to the airing of objections and doubts. The leader models this value by accepting criticism on his or her own judgments.

- When beginning group work, the leader should assign the planning mission to the group in an impartial way. The leader should resist stating preferences and advocating for specific courses of action at the outset in order to reduce bias.

- Consider setting up multiple independent groups to work on the same problems, each carrying out its deliberations under a different leader.

Learning

When considering the leading of school change, one gets back to learning.
Learning is social as well as individual (Senge, 2000). Team learning occurs when a group of people align and function as a whole with a commonality of purpose. It is the process of aligning and developing the capacity of a group to achieve the results its members desire. Team learning builds on the discipline of developing shared vision (Senge, 2006).

Teams that learn think insightfully about complex issues. They coordinate their actions through trust and recognize the roles of team members on other teams throughout the organization. Team learning is most effective when dialogue and discussion are used in tandem. Dialogue takes complex issues and explores them through a facilitator. Views are presented, but people do not cling to their mental models. They do so to listen to others and expand their understanding the issue. Discussion, on the other hand, allows different views on more simplistic issues to be presented and defended in search of the best approach for the question at hand. The leader sets the norms and structures for team learning to occur, which involves minimizing defensive behaviors, establishing opportunities to practice, and fostering connections between people, groups, or other improvement initiatives.

Based on Piaget’s work with children, Sprinthall and Thies-Sprinthall (1983) demonstrated how individual adults—not just young people—learn through developmental stages. Cognitive developmental theory assumes (p. 16):

- All humans process experience through cognitive structures called stages—Piaget’s concept of schemata.
- Such cognitive structures are organized in a hierarchical sequence of stages.
from the less complex to the more complex.

- Growth occurs first within a particular stage and then only to the next stage in the sequence. This latter change is a qualitative shift—a major quantum leap to a significantly more complex system of processing experience.

- Growth is neither automatic nor unilateral but occurs only with appropriate interaction between the human and the environment.

- Behavior can be determined and predicted by an individual’s particular stage of development. Predictions, however, are not exact.

Sprinthall and Thies-Sprinthall (1983) debunk the myth that adulthood is a period of slow cognitive-developmental degeneration. They suggest that the stability of functioning during adulthood may instead be a result of inadequate stimulating interaction. The implication of cognitive development theory is that adult learning in schools—often labeled “professional development”—should take into account the tenets of this theory. An atmosphere (or culture) needs to respond to and stimulate learning. To most effectively foster learning in school change efforts, professional development activities must match the learning stage of its adult participants.

Argyris (1991) points to the importance of learning from mistakes—double-loop learning—rather than behaving in a way to avoid failure—single-loop learning. Because many professionals tend to achieve success at work by calling upon academic-based knowledge to solve problems (i.e. single loop learning), they have rarely practiced how to learn from failure. Failure is typically seen as something to cover up, to avoid, to downplay, or to blame on others; defensiveness is ripe. Double-loop learning—which
facilitates learning—is not simply how people feel, but how they think when designing and implementing actions. Questioning a colleague’s reasoning is not a sign of mistrust but a valuable opportunity for learning. As incorporated by Senge, double-loop learning forms an important component of team learning.

Bolman and Deal’s frames

Bolman and Deal (2003) provide a useful framework to organize, characterize, and interpret organizational change. They do so via four frames: structural, human resource, political, and symbolic. The frames can be easily applied to the school setting.

Structures must be designed to meet the organizational needs of the school. If overlooked, energy and resources get misdirected. The analysis of issues or deficiencies and subsequent restructuring may be enough to fix problems. The complex work of school change via the structural lens begins by coordinating efforts both “vertically” (between authority structures) and “laterally” (within working groups). Several structural dilemmas may present itself and require the leader’s attention: too little work (underuse) versus too much work (overload); excessive autonomy versus excessive interdependence; too loose versus too tight (supervision); and goalless or goalbound (Bolman and Deal, 2003). The skillful leader continually monitors these facets of the organization’s structure to provide the best laboratory for improvement.

Schools, of course, are human systems and cannot be viewed solely through a structural lens. Bolman and Deal’s human resource frame centers on how characteristics of organizations and people shape what they do for one another. It relies on the
assumption that organizations exist to serve human needs rather than the reverse and that when the fit between individual and system is good, both will benefit (Bolman and Deal, 2003).

Much like the critical importance of teachers setting high expectations for their students, leaders must also believe that all members of the school community can work positively toward school improvement. Low expectations for these people can all too often result in a self-fulfilling prophecy, leading to negative responses, frustration, or conflict with management. Schools with effective human resource management employ strategies of hiring the right people, investing in them, and empowering them to encourage participation in school improvement (Bolman and Deal, 2003).

One cannot think of systems of people without taking into consideration the nature of politics. The political frame views decision making and resource allocation in a context of scarcity and divergent interests (Bolman and Deal, 2003). In today’s climate of tightening budgets, politics play a critical role in the actions schools take and the leverage school leaders have in advocating for resources. The political frame sees organizations as coalitions of diverse individuals and interest groups. The differences among coalition members—in values, beliefs, information, etc.—can create conflict, particularly when power is viewed as an important currency. Goals and decisions emerge from a play of bargaining, negotiation, and jockeying for position among competing stakeholders (Bolman and Deal, 2003).

The political frame asks the principal to be a politician and calls on him or her to exercise four key skills: agenda setting, mapping the political terrain, networking and
forming coalitions, and bargaining and negotiating. Similar to the tenets of Heifitz’s adaptive change theory, the principal focuses attention on important issues, determines the channels of information and who has access to them, develops relationship between and within groups of people, and bargains and negotiates through a focus on issues (not positions) all the while separating the people from the problem (Bolman and Deal, 2003).

Finally, Bolman and Deal offer the symbolic frame which focuses on how people make sense of the images, actions, and symbols they see everyday. Viewing schools through the symbolic frame requires the observer to place the most importance not on what happens but on what it means. Events can have multiple meanings because people interpret experiences differently, which sometimes breeds uncertainty or confusion. People create symbols to resolve this ambiguity and find direction and predictability. Culture is what binds an organization together and unites people around shared values and beliefs (Bolman and Deal, 2003). This is why leadership for change places such high importance on developing a shared vision based on strong relationships and supporting structures.

The school leader: agent for change

A leader is a dealer in hope.
- Napoleon Bonaparte

Attention must be given to the individual qualities effective principals bring to their work. It goes beyond the technical expertise they need to manage their buildings. It speaks to who the leaders are, what they stand for, and how they go about their work. The examination should start with Starratt’s (2004) concept of the ethical leader, which
should form the essence of the school leader. Three virtues lay the foundation of ethical leadership: responsibility, authenticity, and presence. They share a dynamic interaction that, when working in conjunction with each other, provides both a decision-making compass as well as an effective tool for school change.

Responsibility is a concept that requires ownership toward one’s role in a problem as well as one’s part in the solution. Responsibility involves holding individuals accountable for acting in a moral way *ex post facto* as well as expecting people to act this way prior to events taking place—*ex ante facto*. This antecedent responsibility calls on all people to make decisions based on ethics (a set of beliefs, values, etc.) and take into consideration the effects their decisions will have on others (Starratt, 2004).

In examining the proactive component of responsible school leaders, it is helpful to consider three components: responsible *as*, responsible *to*, and responsible *for*. A leader is responsible *as* a human being when he or she understands the human condition—needs, perspectives, etc.—when taking a stand on an issue. A leader is also responsible *as* an educator and administrative leader when he or she becomes a continual “learner” about issues relevant to school life (e.g. adolescent stress). Finally, a leader is responsible *as* a citizen-administrator when he or she promotes the mission and expectations of the broader community, as well as when work is oriented toward the common good (Starratt, 2004).

School leaders have a bevy of constituents to serve. They are responsible *to* students, teachers and staff, parents, school district personnel, and state and local governing agencies. A school leader acts in a responsible way *to* when he or she accepts
that all members of the school community have a right (and also a responsibility) to be part of what is determined best for the social, emotional, and academic growth of its young people—no constituents can be omitted from the educational process. An effective school leader also cultivates positive relationships with these people (Starratt, 2004).

Finally, school leaders carry a responsibility for creating a healthy and productive school culture. This takes the form of establishing an environment where quality relationships can develop, where teaching and learning is established as paramount, and where the student-as-an-individual remains the focus of the school’s work (Starratt, 2004).

Authenticity represents the second virtue of ethical leadership. This concept is founded in the belief that who you are carries much more importance than does your particular leadership style. It embodies the way leaders live their lives, how close they remain to their core values, and to what degree they recognize their freedom to be in the culture in which they exist. Authenticity requires the leader to have reciprocal relationships with his or her constituents because schools are human systems that require two-way dialogue. The leader establishes a culture where others can be authentic. The leader is on a constant quest for the “truth” in educational research, policies, and knowledge, so as to better meet the needs of the school community (Starratt, 2004).

Presence, the third virtue, requires leaders to recognize that they do not function in a vacuum—they operate in a series of relationships with others. Being present involves noticing the signals people send out and fully noticing what is in front of someone. In doing so, one lets others know that he or she is “here”, available for discourse, and
engaged in the “now” of the moment. It communicates a mutual presence of one to the other and lets each person into the space of the other, thus enabling healthy and productive relationships to develop (Starratt, 2004).

There exist three types of presence: affirming presence, critical presence, and enabling presence. A leader cognizant of an *affirming* presence will create and maintain structures, relationships, climate, expectations, and rituals that promote the school’s beliefs and values. He or she is also visible within the school setting. A *critical* presence breaks down blockages to authenticity by naming the barrier or the problem between the leader and others. This presence must be continual in nature. Leadership is about action. It is through *enabling* presence that the leader brings people together to act in partnership to make decisions or change. Distributed leadership is an example of an enabling structure. So is giving a teacher the autonomy to be creative within the classroom (Starratt, 2004).

Bolman and Deal (2001) take a transcendental route in describing two entities they believe are missing in many of today’s leaders: soul and spirit. Soul and spirit can help provide depth and meaning in what leaders do everyday to improve schools. Soul is individual and unique, grounded in personal experience; it is found at the core of our being. Spirit is all embracing, representing the oneness, connectedness, interdependence of all things and people. Spirit need not be secular, in fact. A person leading with soul and spirit looks for a bigger purpose, a moral intent that goes beyond the basic managing of a school building and staff (Bolman and Deal, 2001). Such a purpose could be reculturing a school to benefit *all* students in a meaningful way.
Sergiovanni (2005) identifies four virtues that the school leader can cultivate when engaging in cultural work: hope, trust, piety, and civility. Hope is grounded in reality and is based on the belief that an optimistic and positive outlook can enhance physical and mental health (and thus help individuals cope with the stressors of school change). It partners with faith, which represents commitment to a cause (i.e. shared vision). Piety is a leadership virtue that asks people to reflect on and examine their mental models and affiliations. Civility helps individuals reach out to understand others and embrace differences (Sergiovanni, 2005).

Donaldson (2001), in the blending of learning and action, calls upon leaders to possess three qualities: the ambition to find a better way, trust in experiential knowledge, and active caring. The qualities are similar to Sergiovanni’s four virtues. The inspiration to find a better way flows from a leader’s disposition that welcomes and enjoys tough challenges, a disposition that provides hopefulness to his or her colleagues. Leaders are skilled mentors who help others see their current reality and what will and will not work in different situations. This happens through a reciprocal learning process. Active caring stems from the leader’s deep conviction about the goodness of his work. The leader cares for himself and others, as people and as professionals (Donaldson, 2001).

Being a leader is more than just possessing certain qualities, for these skills must also be managed when brought into the school setting. Sergiovanni (2007) offers attributes of leadership through the management of eight basic competencies:

- **Attention**: the ability to focus others on values, ideas, goals, etc. (i.e. the rationale for doing school change work).
- **Meaning:** the ability to connect teachers, parents, and students to the school in such a way that they see their lives useful, sensible, and valued.

- **Trust:** the ability to be viewed as honest, credible, and legitimate in the school setting.

- **Self:** the ability to know who you are, what you believe, and why you do the things you do (Starratt’s “authenticity”).

- **Paradox:** the ability to bring together ideas that seem to be at odds with each other.

- **Effectiveness:** the ability to focus on developing internal capacity for schools to improve culture and performance over time.

- **Follow-up:** the ability to stay engaged as ideas get down to details in order to ensure the standard is achieved.

- **Responsibility:** the ability to have people see their commitments to each other and to the school.

Leading change can often produce times of confusion and chaos. Wheatley (1992) advises the leader to develop the capacity to embrace confusion and chaos by recognizing the natural evolution taking place when new information presents itself in an environment. People have a natural tendency to crave order, stability, and predictability. Change produces distress, however. Jentz and Murphy (2005) offer the Reflective Inquiry and Action (RIA) model to manage this challenge. The authors view confusion as an opportunity for the leader to open up better lines of communication, test their old assumptions and values against changing realities, and develop more creative approaches.
to problem solving. The RIA model embraces many of the attributes of team learning: making sense of new information; putting oneself in the shoes of others to understand other perspectives; and modeling the personal learning one is experiencing.

Goleman, Boyatzis, & McKee (2002) see leaders needing to navigate through the emotions generated by change. Regardless of what leaders set out to do, *how* they go about driving the change is critical. Emotions must be driven in the right direction. It is primal in importance and characterizes what the authors call *resonant* leadership: being attuned to people’s feelings, moving a group toward positive emotions, and inspiring individuals to be in sync with change (no matter how distressing it may be).

The degree to which a principal can motivate groups or individuals to meet improvement goals is determined by the leader’s level of *emotional intelligence (EI)* (Goleman et al., 2002). The authors describe several EI competencies across four categories:

- **Self-Awareness**
  - *Emotional self-awareness:* Being attuned to one’s inner signals and emotions and how that affects their performance.
  - *Accurate self-assessment:* Knowing one’s limitations and strengths, and having a sense of humor about oneself.
  - *Self-confidence:* Knowing one’s abilities with accuracy allows a leader to play on his or her strengths, to accomplish difficult tasks.

- **Self-Management**
  - *Self-control:* Finding ways to manage disturbing emotions and impulses.
- **Transparency**: Living one’s values in an open and authentic manner.

- **Adaptability**: Juggling multiple demands without losing focus or energy.

- **Achievement**: Having high personal standards that drives one to constantly seek performance improvements—both for themselves and others.

- **Initiative**: Having a sense of efficacy, or the belief that one can take control of one’s own destiny.

- **Optimism**: Seeing things in a positive light and “rolling with the punches”, expecting things to change for the better in the near future.

- **Social Awareness**

  - **Empathy**: Feeling the emotions of an individual or a group and understanding their perspectives.

  - **Organizational awareness**: Able to detect social and power networks and be politically astute.

  - **Service**: Fostering an emotional climate that keeps relationships with constituents strong, positive, and on the right track.

- **Relationship Management**

  - **Inspiration**: Moving people with a compelling vision or shared mission.

  - **Influence**: Knowing how to build buy-in from key people and a network of support for an initiative.

  - **Developing others**: Cultivating people’s abilities by showing a genuine interest in others and providing useful feedback.
- Change catalyst: Able to recognize the need for change, to challenge the status quo, and champion the new order.

- Conflict management: Drawing all parties into debate to understand the various perspectives, and then finding a common ideal that everyone can endorse.

- Teamwork and collaboration: Generating a positive group atmosphere to build a productive, collective effort.

The array of qualities deemed necessary for an effective school leader—one driven by a higher sense of purpose—brings one back to the importance of Senge’s emphasis on personal mastery. No principal can feasibly embody all of the aforementioned qualities in any sort of completeness. Nevertheless, the leader must not only be in continual learning mode, but model this behavior to others in the school community. The leader commits him or herself to seeing the truth as clearly as possible, and then taking actions to foster personal growth (Senge, 2006).

Distributing leadership

A community is like a ship; everyone ought to be prepared to take the helm.

- Henrik Ibsen

I start with the premise that the function of leadership is to produce more leaders, not more followers.

- Ralph Nader

The nature of leadership for change in the current landscape of schooling, as well as the array of non-technical leadership qualities necessary for agents of change, calls loudly to distribute leadership. In doing so, it helps to start with a framework.
Spillane, Halverson, & Diamond (2004) view leadership as an activity, one that is not wholly dependent on the school leader. Leadership activity is constructed through the interaction of leaders, followers, and the particular social, cultural, and material contexts at play in a given situation. Four central ideas make up the authors’ distributed leadership perspective: leadership tasks and functions, task-enactment, social distribution of task-enactment, and situational distribution of task-enactment.

The first idea approaches leadership through a set of tasks grounded in the functions of leadership within the school. Functions could include constructing a school vision, holding disciplinary hearings, having parent nights to share information and to dialogue, and supervising teachers to maintain expectations for instruction. Each function in turn has tasks associated with them (Spillane et al., 2004).

One must move beyond viewing leadership as a set of tasks and functions in order to properly analyze leadership distributed across a school. It is necessary to examine the way leadership tasks are enacted. One does this by understanding how school leaders define, present, and carry out their tasks. Emphasis is not on what leaders do, but how they go about it and the thought processes used to make key decisions (Spillane et al., 2004).

The third domain of the leadership framework recognizes that schools spread leadership across a broad social distribution of people. Understanding how various leaders interact with each other while completing tasks is an important component of this practice. Through this perspective, leadership activity is not viewed merely as the division or duplication of work, but rather as actions that stretch over several leaders and
followers within an organization, and over the interdependencies that result from the interplay between people (Spillane et al., 2004).

Finally, leadership activity is dependent on the particular situation present. This places importance on acknowledging the mutuality of the individual and the environment, and the interactive web of people, products, and context. The situation-at-hand influences the decisions leaders make. For example, a school setting with up to date technologies may compel leaders to promote heavy use of the tools to enhance teaching and learning (Spillane et al., 2004).

If one views leadership as an activity spread throughout the school, then there becomes many potential sources of leadership in the school setting: teachers, parents, students, and others. Some states require the use of site councils. Each public school must empower a representative group of teachers, students, and parents to generate school improvement plans, among other responsibilities.

Distributing leadership with teachers

Teachers offer a common and practical opportunity for leadership for they have the most direct contact with students and tend to outlast administrators in years of service at a particular school. Danielsen (2007) divides teacher leadership into two categories: formal and informal. Formal teacher leaders fill role such as department chairs, coaches, or mentors. They are typically selected based on merit and oversee important curriculum projects, professional development, and teacher supervision. Informal teacher leaders emerge spontaneously and organically from the teaching faculty to either respond to a
critical need or to initiate a response to a problem. Their influence stems not from their position but from the respect they command from their colleagues. They lead without authority, but can nevertheless achieve impressive results (Heifitz, 1994). Schools oriented toward a continual process of improvement rely heavily on both formal and informal teacher leaders.

Teacher teams have become one of the most popular school improvement strategies. Schools have distributed leadership by organizing teachers into groups to identify and solve technical and adaptive problems. Scribner, Sawyer, Watson, & Myers (2007) identify three constructs to understand collaborative interactions within a teacher team: purpose, autonomy, and patterns of discourse. These three concepts have an interdependent influence on collaboration.

Teams are formed for purposes, which generally fall into two categories: known-problem solving and discovered-problem finding. When engaging in a problem-solving purpose, teams have a good understanding of a problem and identify the best, established responses. The interaction necessary among team members is relatively straightforward and simple. In contrast, when teams embark on a problem-finding purpose (e.g. why some students are not doing well in school), team members must engage in dialogue and think of new ways to frame a problem. This may include identifying new strategies for managing the dilemma. This requires a significantly higher skillset for team members as well as a strong collaborative culture to support the work (Scribner et al., 2007).

Scribner et al. (2007) define autonomy as the capacity of a teacher team to make decisions that will lead to action and change. Autonomy may vary between teachers,
groups, or administrators, and it will likely be bound to some degree by the larger organization. However, when distributing leadership via teacher teams, constraints must be minimized so as not to damper creativity and effective decision making.

The third construct offered by Scribner et al. (2007) to understand collaboration within teacher teams is *patterns of discourse*. It can be broken down into passive discourse and active discourse; each is partly dependent on the level of purpose and autonomy inherent in the team. Teams that engage in passive discourse simply share information or opinions. General knowledge is enhanced but no meaningful action to address a problem takes place. A lack of defined or shared purpose combined with a low degree of autonomy can lead to passive patterns of discourse and limited to non-existent effectiveness. Active discourse, on the other hand, includes representative speech but also produces substantive action that will result in specific change. Schools searching for effective solutions to problems via distributed teacher leadership teams will foster active discourse by developing shared purpose as well as granting an encouraging level of autonomy (Scribner et al., 2007).

Lavié (2006) further develops the concept of discourse. He places teacher collaboration for school change into five discourses: cultural discourses, effectiveness and improvement discourses, community discourses, restructuring discourses, and critical discourses. *Cultural* discourses see the school setting as a place of shared values and beliefs on the importance of teacher collaboration to enact improvement. The cultural environment regulates social patterns and interactions within a group. Typically, a strong
collaborative culture will exhibit respect for the individual as well as the interdependence between people, and it will value safety and openness (Lavié, 2006).

School *effectiveness and improvement* discourses examine the factors that lead to effective schools. One such example is shared vision and goals. School culture is also increasingly seen as critical to effective student learning (Lavié, 2006).

*School-as-community* discourses center on the concept that schools operate as communities within a larger society. Several traits are inherent in this phenomenon: a unity among members on shared values, beliefs, and interests; reciprocal and meaningful relationships between people; and psychological dimensions associated with being part of a community, such as trust, responsibility, and agency (Lavié, 2006).

To foster broad and deep-reaching school improvement, some systems have entered into *restructuring* discourses. “Professional Learning Communities” (PLC) are one such example, aimed at minimizing teacher isolation and promoting collaboration to encourage shared leadership and learning. Restructuring discourses implies redefining the roles and responsibilities of teachers beyond the classroom. Typically, the work is characterized as “professionalizing” the teaching practice (Lavié, 2006).

The fifth dimension of teacher collaboration is *critical* discourses. This discourse relies on school communities to provide teachers with feedback and new forms of thinking when doing collaborative work. It appreciates a diverse array of beliefs and sees conflict as something to be understood rather than shunned. Larger social society issues are connected to student activities. Collaboration and debate are organized around the broader purposes of schooling (Lavié, 2006).
Distributing leadership with students

Schools are generally not accustomed to incorporating the “student voice” into its decision-making processes in meaningful ways. Student voice is often seen as an untapped resource during school change efforts. Cook-Sather (2002b) illustrates the historical perspective on authorizing students’ perspectives:

Since the advent of formal education in the United States, both the educational system and that system’s every reform have been premised on adults’ notions of how education should be conceptualized and practiced. There is something fundamentally amiss about building and rebuilding an entire system without consulting at any point those it is ostensibly designed to serve… As long as we exclude these perspectives from our conversations about schooling and how it needs to change, our efforts at reform will be based on an incomplete picture of life in classrooms and schools and how that life could be improved. (p. 3)

In practice, student voice can entail the basic task of asking youth for their opinions on various matters, or to a more involved commitment of truly collaborating with students to address problems in their schools (Mitra, 2005). In examining the stress problem, students often offer the best remedies to their struggles—in some sense, they are “experts” on their stress. Focus groups and surveys have identified gender, ethnic, or
age differences in the students’ stress, as well as the degree certain stressors like parental expectations are relevant (Galloway, Pope, & Osberg, 2007; Richards, 2006).

Researchers have identified several benefits to giving students a voice in important school affairs, including agency, belonging, competence, empowerment, and a stronger sense of one’s own abilities (Mitra, 2004; Oldfather, 1995). These attributes are seen as developmental assets to young people. Agency is defined as acting or exerting influence and power in a given situation. Belonging centers on developing quality relationships with both students and adults, which results in having a role at the school. Competence involves developing new abilities and being appreciated for these talents (Mitra, 2004).

Oldfather (1995, p. 132) advocates for student involvement to gain “epistemological empowerment: a sense of intellectual agency and ability to know that emerges from a strong sense of the integrity of one’s processes of constructing meaning.” By participating in leadership activities, students can gain a stronger sense of their own abilities. They find that they can make a difference not only for themselves, but also for others in the school (Oldfather, 1995).

Students can also play an illuminating role in communicating to teachers effective instructional practices, leading to improved engagement in learning activities (Cook-Sather, 2002a). But providing students a meaningful role in school change requires what Mitra (2005, p. 531) calls “enabl[ing] the powerless”. Mitra (2005) views student voice through a community-of-practice frame in which youth and adults mutually engage—with roles and norms—in various activities. The group learns how to engage as a collective so
it can promote learning among group members. In a community-of-practice, perspectives are shared and learned from, and key questions are surfaced in order to give the group its best chance to accomplish its goals.

Moving to a community-of-practice means amending the traditional power structure in which adults dictate, and students follow. It is a change in both how one thinks about eliciting and attending to student voices (including how schools tend to be disinclined to hear them) and how the relationship structures in institutions, that have discouraged student voice, must change (Cook-Sather, 2002b). Teachers and administrators often pre-determine how to empower students rather than conferring with students about how this might happen (Mitra, 2005). To maximize the potential of student voice (for both students and adults), adults must avoid preserving their power and instead engage students to coconstruct roles in a group.

In effectively addressing the student stress problem, it would seem necessary that schools give up some of this control and power to its students. Schools could see better results by fostering the concept of “honored voice”, where student perspectives were invited, responded to, and acted upon (Oldfather, 1995).

Engaging the external school community

The reciprocal relationships valued in leadership distributed to both teachers and adults can also extend to the school community at large. The 2001 Phi Delta Kappa/Gallup Poll of the Public’s Attitudes Toward the Public Schools suggests that public school parents want more say in decisions related to public schools (Fiore, 2002).
Thompson (1998) terms the objective of gaining external and internal support for initiatives as *public and professional engagement*. He contends that without taking into account the following principles, schools are simply publicizing its work rather than engaging its constituents:

- **Reciprocity**: Developing mutual commitments, responsibilities, and goals.
- **Proactivity**: Engagement starts before a school develops its course of action on a problem.
- **Inclusivity**: Giving voice to all members of the internal and external school community.
- **Institutional continuity**: Designing meaningful roles for parents and community members for ongoing improvement.
- **Centrality**: Creating and sustaining collaborative learning communities.
- **Coalition building**: Enlisting allies and adversaries in the process.
- **Clear, ongoing communication**: Continually circulating clear information, priorities, progress, etc. through the school community.

In engaging people, the principal identifies the different groups that make up the external school community (Fiore, 2002). He or she determines the appropriate level of parent involvement and makes community members feel welcome in the school—although meaningful school involvement can also take place at home or in the community. While meaningful engagement is a key objective for school change efforts, publicity efforts can also reap benefits. An example of such is “presenting” students and
their work to parents and community members to highlight the good work taking place in
the school (Fiore, 2002).

Managing conflict during the stages of change

It should be borne in mind that there is nothing more difficult to handle, more doubtful of
success, and more dangerous to carry through than initiating changes…. The innovator
makes enemies of all those who prospered under the old order, and only lukewarm
support is forthcoming from those who would prosper under the new.

- Machiavelli (in Deal and Peterson, p. 96, 1994)

Leaders go about change through phases. Deal and Peterson (1994) provide three
overlapping stages: planning, implementation, and institutionalization. The initial stage of
planning centers on the critical debate on what needs to be done. Unclear or conflicting
goals and beliefs, as well as pressure from special interest groups, can plague planning
efforts. By clearly defining goals, allowing beliefs to surface, articulating roles and
responsibilities, and identifying available resources, the leader can overcome these
challenges (Deal and Peterson, 1994).

Implementation takes the outputs of the planning stage and puts them into action.
It requires the leader to balance technical activity with cultural transition. This often
occurs “on the fly” as actions become operational. The leader must manage those
individuals working to undermine changes in order to preserve the status quo. Clear
communication, supervision, conflict management, and reducing pressures associated
with change become important tasks for the leader (Deal and Peterson, 1994).

The final stage of the change process is institutionalization. This occurs when the
actions implemented during the previous stage—representing new structures, routines,
roles, norms, values, and beliefs—become a normal part of the school setting. A new culture has been established through the combination of formal technical features and a new social dynamic. Because challenges and barriers to the planning and implementation stages can be extreme and time consuming, schools often experience only the hope of reaching this ultimate stage (Deal and Peterson, 1994).

Movement through these phases is rarely linear. Fullan (2001) identifies an implementation dip common to successful change efforts. The dip is a drop in performance and confidence as newly presented challenges require new skills as well as new ways of thinking and learning. To address this dip, leaders must focus on both the emotional fear generated by change and also the technical skills necessary to recapture the improvement trend. The leader maintains high expectations, but provides appropriate support to manage the challenge of school change (Fullan, 2001).

The leadership of a school change effort requires the orchestration of conflict (often between multiple parties) (Heifitz, 1994). When values compete, a requisite of adaptive work, conflict or resistance appears. The principal can use his or her formal authority to mediate and arbitrate, when necessary. This starts with the leader understanding the interests and beliefs of the various groups having conflict, specifically how people are making sense of the issues (Heifitz, 1994).

Leading across competing groups or individuals means permeating the traditional boundaries and reforming them into new boundaries (Heifitz, 1994). For example, a school leader might immerse himself into a department of teachers bent on protecting the perceived academic rigor of a curriculum (e.g. maintaining the amount of homework) and
challenge them to consider the perspective of students (who must carry a course load that includes five or six other subjects). In doing so, the group may adjust its views and approaches toward homework and reconstitute its boundaries to better incorporate the student perspective.

Orchestrating conflict is no easy task for a principal. The leader must manage distress so it does not get out of hand or result in personal attacks. One way to do this is to refocus attention on issues and not on individuals. Another method is to cultivate new coalitions that share similar interests (Heifitz, 1994).

As Argyris invites leaders to learn from failure, Fullan (2001) also sees resistance as an opportunity to learn. The voice of resisters should be incorporated for two reasons: (1) they sometimes provide answers or ideas that one has missed when tackling complex problems; and (2) they are crucial when it comes to the politics of implementation work. Successful organizations deliberately build in differences to the work (Fullan, 2001). This approach also minimizes the risk of Janis’ “groupthink”.

*Communication during change*

When people talk, listen completely. Most people never listen.

- Earnest Hemingway

The literature on leadership for change appropriately places heavy consideration on communication. Porter and Samovar (1994, p. 7) offer a basic definition of *communication* as “a form of human behavior that is derived from a need to connect and interact with other human beings.” The need for social interaction is met through our spoken words and unspoken actions, each of which send messages to those we interact
with. Communication becomes intentional when our behavior is designed to induce or elicit a particular response from another person (Porter and Samovar, 1994). A skilled school leader will carefully manage the intentional communication and messages that emanate from a school change effort.

Porter and Samovar (1994) offer eight ingredients to intentional communication:

- **Behavioral source:** the person who needs or desires to communicate with others.
- **Encoding:** an internal activity in which verbal and nonverbal behaviors are selected to create a message.
- **Message:** the set of verbal and/or nonverbal symbols that represent a person’s views at that moment.
- **Channel:** the physical means by which a message is delivered.
- **Responders:** those who receive the message.
- **Decoding:** the internal process similar to encoding, but done by the receiver of the message.
- **Response:** what a person decides to do about a message.
- **Feedback:** information available to the source that permits him or her to make judgments about the communication’s effectiveness.

The ingredients of communication partially explain its nature. To better understand how communication actually works, Porter and Samovar (1994) identify four characteristics: (1) communication is a dynamic, ever-changing activity; (2) communication is interactive and must take place between people; (3) communication is
irreversible in that it cannot be retrieved once sent (e.g. “foot in mouth”); and (4) communication takes place in both a physical and social context, which can affect what is said or done.

Communication is critical to school improvement initiatives because it is a basic function of culture. Communication entails much more than the content and structure of language; it serves the purposes of allowing people to make meaningful connections with others, to make sense out of events and thus learn, and to share feelings, knowledge, and needs (Gay, 2000). These are all symbols of culture and communication transmits them to and across groups (Porter and Samovar, 1994).

Doing culture work requires recognizing that culture is ethnocentric in nature (Porter and Samovar, 1994). Groups view the components of culture through their unique lenses and a skilled leader learns how to adapt communicative approaches to best match the group’s characteristics. European Americans as an ethnicity tend to avoid or minimize opposition in dialogue (for example, on school change) because they feel conflict may produce poor results. Asians share this approach by valuing collectivism, saving face, and maintaining harmony during oppositional discussions. These are nearly opposite of African Americans during discourse, who tend to take strong positions of advocacy on certain points of view and weave in emotions while purposely challenging the validity of oppositional ideas (Gay, 2000). Gay (2000) suggests change effort discourse should pay greater attention to communication dynamics than to linguistic structures.
Hensley and Burmeister (2004) see effective leaders of school change as *artists* of communication. Leaders remain positive in the school setting and say good things about their constituents. They model the type of behaviors they want others to demonstrate. They celebrate the successes and send the message that failures are opportunities to learn. They also place a high importance on communicating trust and respect as integral to a positive and professional school culture.

Deal and Peterson (1994, p. 107) see the principal as a I, who can “articulate the inspiring, abstract hopes and dreams of the change effort through metaphors, stories, and prose.” These messages can bring together the school community during times of negativism or distress. The principal articulates what the school might become and communicates the hope that it can get there (Deal and Peterson, 1994).

The concept of dialogue by Senge was mentioned earlier in this chapter, but it deserves further attention. Isaacs (1999, p. 19) defines *dialogue* as “a conversation with a center, not sides.” It takes the energy among differences and channels it toward a greater common sense, representing a means to access new knowledge and understanding. Rooted in the Greek words *dia* (meaning “through”) and *logos* (meaning “meaning”), dialogue can be viewed as a *flow of meaning*. In dialogue, people think together and refrain from taking one’s position as final. By resisting the need for certainty or control, options that seemed impossible or nonexistent can become the reality (Isaacs, 1999).

To facilitate dialogue, Isaacs (1999) suggests one addresses three levels of action: (1) produce coherent actions by developing the capacity for new behavior; (2) create fluid structures of interaction by seeing the forces operating below the surface of one’s
conversations (termed “predictive intuition”); and (3) provide wholesome space for
dialogue, keeping in mind how the context of the environment influences how we think
and act (termed “architecture of the invisible”). Isaacs’ research mirrors the tenets
promoted by Senge’s team learning approach.

Isaacs (1999) offers that at the heart of dialogue is the ability to listen. Listening
requires developing an inner silence, and heeding one’s mental models. This task is
particularly challenging because our culture is dominated by sight—we experience
thousands of fast-moving images via technology and television alone. But seeing and
listening are very different. Listening’s value is that it fosters a greater sense of
participation in the world (Isaacs, 1999).

Learning to listen begins with self-reflection on how one listens in the “now”. It
involves realizing how much of one’s past memory influences one’s reaction to others.
When listening, one sticks to the facts at hand and resists Argyris’ Ladder of Inference,
which can lead to drawing quick (and never fully accurate) conclusions based on past
experiences. Skilled leaders not only learn to listen productively as individuals, but they
search for opportunities for groups to “listen together” as a part of a larger whole (Isaacs,
1999).

Isaacs (1999) terms leaders of dialogue as “conveners”. In conjunction to
modeling good dialogue for others (e.g. creating a safe environment for all, challenging
people to listen and suspend quick judgments, and promoting reflective inquiry), the
leader can cultivate organizational dialogue. Whole organizations become dialogic by
following four practices:
- *Suspending* traditional ways of operating in order to promote systems thinking;
- *Respecting* the nature of relationships that exist in and around the organization;
- *Listening* in order to stay present and fully participative; and
- Allowing the central *voice* of the organization to flourish (Isaacs, 1999).

After establishing the importance of communication during reculturing work, research offers several effective means to communicate values, ideas, and messages. E-mail is efficient and informal, quickly passing information and documents between parties worldwide (Hensley & Burmeister, 2004). It complements more formal printed vehicles of communication like memos, letters, and pamphlets. There exists a potentially significant pitfall to using email and other written methods, however. The writer’s voice, tone, and emotions are very hard to capture in writing and can often be misinterpreted, leading the receiver to misunderstand the message or potentially get their feelings hurt.

Most people, notably students, prefer face-to-face contact with school leaders. This can happen informally or more formally through scheduled meetings. In order for meetings to effectively communicate information, leaders must carefully set the agenda, rules of conduct, and objectives (Hensley & Burmeister, 2004). Zorn et al. (2006) offer the use of focus groups not only to collect data in the school setting, but also to provide a value to the participants. The authors found that focus group interaction led to increased confidence and motivation toward participating in dialogue; members of the group were empowered to communicate.
In leadership for change, the principal takes into account the makeup of the environment and chooses a corresponding communicative approach in order to bring people together for dialogue, with an aim toward an improved and productive culture. This includes acknowledging the context of the culture and the participants in the school setting and matching communication strategies to get the desired results.

Summary of theme

Leadership for change takes place in a particular context, and the leader must adapt his style and actions accordingly. In today’s complex and high accountability environment the leader distributes leadership rather than give orders and demand compliance. He develops technical as well as adaptive skills, and uses social and emotional skills to manage emotions and inspire teamwork. Leadership frameworks guide and organize the work to be done, help manage conflict and political demands, and help communicate vital information to key constituencies. Today’s school leader builds the capacity of the school community to foster change to improve teaching and learning.

III. School-based Student Stress: Effects on Students, Manifestations in the School Setting, and Stressors

People don’t go to school to learn. They go to get good grades which brings them to college, which brings them the high-paying job, which brings them to happiness, so they think. But basically, grades is where it’s at.

- Kevin from Doing School
Introduction to the stress problem

Pope (2001) sparked the current debate on academic stress by profiling five high school students in the San Francisco Bay area. These young people appeared to view high school not as the up-and-down growth experience it has traditionally been, but rather as a means to an end, taking a more performance-based mentality that school is something to be “done” in order to get into the right college or meet pre-determined achievement goals.

Little empirical research exists at this time on whether academic stress is a significant problem—most evidence is anecdotal. However, Stanford University has begun a series of studies on the nature and effects of academic stress as well as chronicling how high schools have addressed the problem (Galloway, Pope, and Osberg, 2007; Pope, 2007). As the research builds on stress’ relevance in today’s school setting, it may help to highlight a few trends as reported in popular media—as asking whether these are indicative of a growing stress problem:

- **Brazen cheating:** Chapel Hill High School (NC) breaks a cheating ring in which students used a master key to enter teachers’ offices at night and use camera phones to copy exam answers. The cheating went on for several years and may have involved hundreds of students (Sadgrove & Schultz, 2008).

- **A penchant for leadership:** In recent years, Harvard University and its contemporaries have seen a dramatic increase in the number of new student clubs and organizations started at the schools. They suspect students are
looking to add leadership activities to their résumés rather than join existing groups (Wertheimer, 2007).

- **Start ‘em young:*** The cover of *Boston Magazine’s* September 2007 issue read, “The Best Schools – Gotta Start ‘Em Young! Why It’s Never Too Early to Stress About Your Child’s Education”. The issue, pointing to the competitiveness of admission to Ivy League schools, went on to *rate* the city’s best preschools, according to facilities, programs, class sizes, etc. (Alexander, 2007).

- **Surveys, polls, and focus groups:** A March, 2008 Associated Press poll of college students found four in ten admitting to chronic stress. Stanford surveyed over three thousand middle and high schoolers and found greater than 70% of students reported suffering from at least one physical symptom of stress. (Fram and Tompson, 2008; Galloway and Pope, 2008)

- **School health concerns:** Hardy (2003) reports a growing concern across the country by school nurses, psychologists, counselors, and others on the mental health of children and adolescents.

- **Student authorship:** Student newspapers at various suburban high schools have brought increased focus on the stress their peers are living with. Some papers have featured a monthly column highlighting relevant stress issues and its commentary. (Kristeller, 2008; Colby, 2006)

- **Countermeasures:** In recognizing a culture in which everyone is “plugged in” to technology and filling their days with structured activities, Johnson (2008)
wrote on the merits of boredom in the Opinions/Ideas section of The Boston Globe. She advocated for occasionally taking the time to just sit and think, to not check e-mail or start a project, stating, “You might be surprised by what happens.”

Concerns about academic stress are anything but new, despite the increased attention to it. West and Wood (1970) questioned public middle and high schoolers on the extent they were under pressure and what the sources might be. Over two-thirds of students felt pressure to do well in school while one-third of the youth dropped an activity to better handle their school work load. Homework, like it is today, was identified as the primary culprit (along with parental pressure).

To determine whether academic stress is a problem in today’s schools, one must highlight possible manifestations of the problem. This section will also include potential causes of school stress (i.e. the “stressors”). This overview will transition into a more comprehensive review of the impact of stress on physical and mental well-being as well as stress’ impact on learning.

Introduction to the manifestations of stress

Stanford University’s extensive surveying of the academic stress problem found a variety of student and administrator perceptions of the consequences of academic stress. The researchers were able to categorize responses into the following groups: consequences for students’ mental and physical well-being (anxiety/worry, depression, suicide ideation, physical symptoms of distress, self-mutilation, eating/sleep disorders),
consequences for student engagement in school (disengagement, overscheduling, dropped activities), and consequences for civic/spiritual health (value conflicts, cheating) (Galloway et al., 2007; Pope, 2007).

Anxiety levels—sometimes characterized as “academic worry” in the school setting—have increased substantially in recent decades for the population. Twenge (2000) documented an increase of nearly a full standard deviation in anxiety between 1952 and 1993 in both college student and child samples. Twenge offers three models to explain the increase: overall threat (related to one’s environment), economic conditions (increase in anxiety as economic conditions deteriorate), and social connectedness (anxiety increases as social bonds weaken)—the latter is perhaps the most relevant to the culture in communities of high socio-economic status.

While anxiety theory states that a level of economic security will prevent distress, Luthar (2005) sees specific challenges to well-being for children of the affluent—stereotypically believed to be “low risk”. The researcher studied middle and high school students and found upper-class children experienced elevated levels of substance abuse, anxiety, and depression, compared to contemporaries in lower income communities. These problems may affect the school experience for these adolescents who come from privilege. Stanford’s research could begin to explain this connection (Galloway et al., 2007; Pope, 2007).
Introduction to the potential causes of the stress problem

Research and anecdotal observations have identified numerous factors that influence the stress levels of adolescents. Burnett and Fanshawe (1997) measured 68 distinct school-related items from 1620 high school students in Australia; there are many other factors that can be identified but are at best loosely linked to stress. Schools tend to focus on the following categories and issues when examining the stress problem: School (high stakes testing, homework, tracking/leveling, start times, instructional practices, extra-curricular activities, teacher flexibility, rewards/awards); Home (parental expectations and support); Self (expectations, competitiveness with peers, perspective/motivation, technology use); Other (college admissions, employment) (Galloway et al., 2007; Pope, 2007; Richards, 2006; Putwain, 2007; Jones and Ginsberg, 2006; Schroeder, 2006). Several of these issues will be highlighted in greater depth later in this chapter.

What is stress?

The term stress has generated considerable attention by medical and psychology researchers, as well as by laymen. However, there lacks a unified definition. Stress’ meaning is obfuscated by various usages. Lazurus (1966, p. 10) offered a simple idea that stress is the notion that a “person or animal is beset by powerful pressures which greatly tax the adaptive resources of the biological or psychological system” [e.g. a threat]. Mandler and Watson (1966) described stress as an interruption of a person’s plan of behavior (the disturbance being the stressor rather than a threat). Regardless of the
preferred definition, the implication is that one’s equilibrium has been upset and a response is necessary to bring back balance. A stressful experience can affect one’s behavior as well as have an impact on physiology.

Hans Selye’s (1976) pivotal book The Stress of Life classified stress according to its characteristics and distinguished between the concepts of stress and the stressor. Stress was a fact of life that could not be avoided and in some cases, was not necessarily something bad. Stress was not a reaction; rather, there was a stressor that caused a stress response. He classified three prongs of stress: (1) the stressor, the agent that starts trouble in the body (e.g. brain); (2) the defensive measures, such as hormones which encourage the body to put up a defense; and (3) the mechanisms for surrender, such as a hormonal response not to fight emotional stressors (Selye, 1976).

The key part of the brain in relation to Selye’s “defensive measures” is the hypothalamus (in the diencephalons of the subcortex), which is the primary activator of the autonomic nervous system and the endocrine system (regulators of body temperature, hormones, and width of blood vessels). These systems serve as stress reactivity pathways in the body. When the hypothalamus encounters a stressor, it releases various hormones that cause a variety of physiological changes—accelerated heart rate, dilation of arteries and airways, increased metabolic rates and blood pressure, increased oxygen consumption, etc.—to prepare the body for a physical response to the stressor. There are also series of other physical effects that stress can produce, such as dry mouth, blood vessel contraction, muscle contraction, headaches, and other limiting reactions (Greenberg, 2008).
According to Selye (1976), the problem with emotional stressors is that a person can build up high levels of stress hormones in their body because the body chooses instead to fight external toxicants (e.g. physical threats). During our day, we must monitor our levels of stress hormones, and tune down our activities or thought processes as a result. Selye states (p. 412), “To watch our critical stress level is just as important as to watch our critical quota of cocktails.” He advises us to monitor in this way because of the mental, physical, and learning problems that chronic emotional stress can produce.

Lazurus (1966) provides four classes of stress reactions, each carrying schooling implications: (1) reports of disturbed affects such as fear, anxiety, anger, depression, guilt, etc.; (2) motor behaviors such as muscle tension, speech disturbances, and particular facial expressions; (3) changes in the adequacy of cognitive functioning such as impaired perception, judgment, thought, problem-solving, and social adaptation; and (4) physiological change such as headaches, sweating, blood pressure, heart rate, etc.—the classic being the “fight or flight” response.

Because stress is inevitable and produces individualized responses, it is helpful to look at variables that can determine one’s ability to meet the challenges. It is not the event that is stressful to someone, but rather how it is perceived by the receiver—the meaning given to the stressor. A critical variable to meeting the challenge is the degree that a person has a sense of control over the event or over his or her actions in dealing with it (Weiner, 1992).

The onset, duration, and variability of stressful experiences are also key components to the strength of the challenge. Some events are acute while others are
chronic and perennially stressful. Some events come without warning while others are repetitive. One’s ability to effectively appraise external and internal signals, one’s ability to rely on a set of coping skills, one’s social support network, as well as personality traits and age, are additional variables to consider (Weiner, 1992). A subsequent section in this chapter will highlight various strategies used by people to cope with stress.

The historical study of stress

The word “stress” came into vogue in the United States during and following World War II. Physicians, psychiatrists, and psychologists were enlisted to study the conditions under which some men would fail to fire their weapons, show serious impairment in performing their duties, or develop neurotic symptoms associated with combat or preparation for combat. It became clear that the stress of war produced significant adverse affects in some of its soldiers (Lazurus, 1966).

Stress research, however, started long before the 20th century began. Charles Darwin in On the Origin of Species (published in 1859) first laid down the principles for the concept of stress in his reassessment of the relationship of the organism to its environment. He found that some organisms were better able to adapt to stressors in the environment than others (and these species won out as part of natural selection) (Lazurus, 1966).

Four subsequent milestones in the development of the understanding of stress have been identified by Lovallo (2005). The first idea, surfacing shortly after Darwin’s work, was Claude Bernard’s concept of internal environment. Bernard held that complex
living organisms are driven by both the external environment and the internal environment. He believed that maintaining oneself through life required keeping one’s internal environment constant in the face of a changing external environment. His key idea was that physical challenges to an organism provoke responses to counteract those threats. This idea forms the modern concept of stress and stress responses, though he never used those actual words (Lovallo, 2005).

Walter Cannon in the early 20th century developed the concept of homeostasis at Harvard University. He used the term to describe the process of maintaining internal stability in the face of environmental change. The concept was useful in determining a person’s optimal range of performance through the regulation of the autonomic nervous system. Cannon focused on the areas of the brain which contained the structures necessary to detect internal states and invoke the proper compensatory responses (Lovallo, 2005). Using an example of a person confronted in a dark alley by an imposing figure, Cannon was the first to coin the term “fight-or-flight response” to identify the physical reaction resulting from emotional distress (Greenberg, 2008).

Hans Selye is commonly referred to as the father of stress research. In the early to mid 20th century, Selye advanced the systemic understanding of the physiological regulatory responses to threats to an organism. He specialized in how animals responded to various physical stressors, including heat, cold, infection, and toxic substances. He was able to find that regardless of the threat, animals responded in a consistent pattern in an effort to restore homeostasis. He termed this pattern the general adaptation syndrome. Selye recognized that the stress response was adaptive because it sought to preserve the
immediate life of the organism. But he also recognized that there was a long-term cost to the animal mounting the resistance, specifically in tissue pathology. He found that during exposure to one stressor, an organism’s ability to withstand a second, even milder, stressor was impaired. However, he also found that repeated exposure to moderate stressors could increase an organism’s ability to withstand longer or more severe exposure to the same stressor (e.g. training for an endurance event) (Lovallo, 2005).

Sterling and Eyer in 1988 coined the term *allostasis*, which captures the negative impact of chronic stress, as suggested by Selye. When a stressor or demand has not been removed or neutralized, maintaining homeostasis may become a source of ongoing wear and tear on an organism’s system. General adaptation syndrome cannot be maintained indefinitely because an organism’s resources will eventually be depleted. Allostatic load becomes relevant when we consider the impact of lesser stresses on long-term health. It may become damaging because these stresses exert a constant demand on the system, even though short-term effects may be negligible (Lovallo, 2005).

*Stress’ effects in the school setting*

It is unclear whether the stress culture at high-achieving, college preparatory schools manifests itself in unhealthy student behaviors or whether instead the behaviors of students and others determine the nature of the culture. It is likely that students, in conjunction with parents and the school, play a role in creating and fostering an unhealthy culture. Students enter the culture and often change their behaviors when beginning to feel the effects of stress.
While the effects of psychological stress are typically viewed through the lens of the individual, Torsheim and Wold (2001) make a case that one should also take into account the whole school context. They argue that the study of stress would benefit from learning how contextual factors interact with individual characteristics. This would require modeling stress as a multi-level phenomenon, where the dynamics between individual differences and the environment produce negative effects on health.

Despite the merits of taking a contextual view, research clearly points to the individualized nature of stress’ effects. What affects one person, may not impact another. Lovallo (2005) provides three major sources of individual differences in reactivity to psychological stressors: (1) persons may differ based on their personalities—cognitive and emotional characteristics—and how they react to perceived stress (e.g. “Type A” personalities were found by Friedman and Rosenman (1959) to be a strong predictor of heart disease); (2) persons may have different physical responses due to brain outputs (e.g. heart rate increase depending on one’s ability to handle demanding tasks); and (3) different reactions based on physical changes (e.g. disease) based elsewhere in the body.

Adolescence

Many descriptors have been used to describe the tumultuous and stressful time known as adolescence. Psychologists tend to characterize the period between the onset of puberty to the beginning of adult roles and responsibilities as one of heightened storm and stress. This metaphor highlights a classic health paradox. Compared to the period of childhood, adolescence brings significant gains in strength, resilience, and reasoning
abilities. However, mortality rates increase 200 percent in the same time period. The source of this troubling statistic is not disease or infection, but rather the difficulties in controlling behavior and emotion. For upwards of 20 percent of the adolescent population, reckless, impulsive, and over-reactive behavior rules (Dahl, 2004).

Despite the dramatic behavior displayed by many youth, upwards of 80 percent have little or no major issues during adolescence. They maintain positive relationships with friends, parents, and the school (Dahl, 2004). However, when viewing the stress problem, it is helpful to remember the special challenges that the adolescent period brings to many young people. Adolescence may bring intense or strong feelings about school to youth who do not yet have the social and emotional skills to effectively control their emotions or behavior (imagine a turbo-charging car with an unskilled driver at the wheel). The implication for schools and parents is the need to create the appropriate social scaffolding to allow adolescents the space to make increasingly independent decisions (i.e. to self-direct their behavior) (Dahl, 2004).

Stress’ effects on physical well-being

Research has established a link between psychological stress and physiological problems—termed “psychogenic psychosomatic disease” (Greenberg, 2008). Cohen (2005) conducted a series of classic studies in which he associated psychological stress with an increased risk for developing respiratory illness for persons intentionally exposed to a common cold virus. He found that the longer the duration of the stressor the greater the risk of illness because the immune system’s defenses were lowered. From an
anecdotal perspective, the common cold appears to be the primary reason for sickness-related absences from school. Stress research has generally not included school attendance associations.

Stress’ physical effects can go beyond minor illnesses and can have much more serious outcomes. McEwan and Stellar (1993) found evidence in medical literature that acute or chronic stress contributes significantly as a risk factor to expression of disease, including: asthma; diabetes; gastrointestinal disorders (e.g. ulcers); myocardial infarction (e.g. coronary heart disease); and cancer, viral infections, and autoimmunity. Stress has also been suspected to have a close link to hypertension (high blood pressure), backaches, and migraine and tension headaches (Greenberg, 2008).

Stress’ effects on mental well-being

Happiness is not having what you want, but wanting what you have.
- Rabbi Hyman Schachtel

What would it profit a man to gain the whole world but forfeit his soul?
- Matthew 16:26

Adolescence is a time of marked physical growth, but it is also a significant period of mental development. Chronic or acute stress can impact mental well-being. Anxiety, whether it comes from school, home, or society, was defined by Erikson (1950, p. 362) as “diffuse states of tension… which magnify and even cause the illusion of an outer danger, without pointing to any avenue of defense or mastery.” This concept goes beyond the more simplistic notion of fear, in which apprehension can be targeted, appraised, and then realistically countered (Erikson, 1950). Many students cannot isolate
the sources of their stress (or miss the true target), so it is conceivable many are operating in a state of chronic anxiety. Anxiety can cause a physical response to an unreasonably perceived threat, or a response that is excessively intense. It can also impair an individual. When these reactions occur, an anxiety disorder is said to exist (Ollendick, Grills, & Alexander, 2002).

Eating disorders and self-mutilation—disorders of control—can be frequent in the high school setting. Stress can leave adolescents believing they have lost emotional control of their lives. The pain of feeling overwhelmed can be substituted with the controlled pain of self-mutilation or starving oneself. Young people may turn to other destructive behaviors, such as drug and alcohol abuse, to numb their emotions (Jones and Ginsburg, 2006).

Young people who are extensively stressed can become overly dependent on others (adults, parents, friends); this lack of self direction and control can lead to a feeling of helplessness (Elkind, 1988). Peterson, Maier, and Seligman (1993) developed the concept of learned helplessness, in which children become unable to take action when they feel helpless or threatened. These young people fall into a pattern of paralysis and can lose all motivation for learning.

Suicide is one of the three leading causes of deaths for adolescents and young adults worldwide. Ang and Huan (2006) presented empirical evidence that pointed toward academic stress as a factor contributing to suicidal ideation in East Asian adolescents. The source of this stress was linked most closely to high expectations from home and school. The authors also pointed to academic failure’s strong association with
depression as well as the link between depression and suicidal ideation. Despite the measured increases in anxiety and perceived rise in stress levels in suburban schools, adolescent suicides in the United States have dropped in recent years (CDC, 2008).

*Perfectionism* has been viewed as a personality defect that causes individuals to work toward unachievable goals and evaluate themselves strictly and unrealistically (Dixon, 2004). Gilman and Ashby (2003) studied two types of perfectionists, *adaptive* (high expectations but recognizes personal limitations) and *maladaptive* (high expectations but having a perceived inability to meet these standards), and found that the latter experienced significant and negative perceptions of school and family relationships, as well as greater emotional distress. The bulk of research on perfectionism has taken place in gifted and talented schools. However, Dr. David Burns from Stanford University estimates that about half of the population in this country carry perfectionist tendencies (Adderholdt and Goldberg, 1999). Additional research is needed to determine whether an performance-driven school culture can push students who would not normally be characterized as having a perfectionism disorder toward exhibiting perfectionist tendencies and traits.

Accordino, Accordino, and Slaney (2000) illustrated the complexity of perfectionism as it relates to mental health and achievement. In studying over one hundred high school students, they found students’ personal standards were significant predictors of academic achievement, and that as students’ personal standards increased, their levels of depression decreased and self-esteem increased. However, when students experienced a discrepancy between their personal standards and actual performance
(potentially caused by unrealistically high self-determined expectations), their depression levels increased and self-esteem decreased. In examining perfectionist tendencies, one needs to distinguish between a healthy pursuit of excellence and an unhealthy drive toward an impossible goal (Adderholdt and Goldberg, 1999).

Economist and author Steven Levitt (2005) calls incentives “the cornerstone of modern life”. The choices students make in school have its roots in motivational theory and can be characterized as either intrinsically- or extrinsically-motivated. Ryan and Deci (2000) define intrinsic motivation as actions done for joy or fun; it typically carries little or no immediate or tangible reward (e.g. learning for the excitement of learning). Contrarily, extrinsic motivation is done for a reward or some outside item to be possessed (e.g. gifts or approval from parents for getting high grades). Extrinsic motivation has been found to produce greater anxiety and lead to poorer coping when failure happens (Ryan and Deci, 2000).

Public high schools are hypocritical when trumpeting a love of lifelong learning while at the same time overemphasizing extrinsic rewards (such as honor rolls, grade point average rankings, and honor societies), for these messages are antithetical in nature. Colleges join the hypocrisy by promoting the importance of earning multiple awards, standing out among peers, and achieving a very high grade point average, all the while maintaining balance, wholeness, and health during one’s high school experience. As a result, school can become something that is done to create a perfect transcript, a place simply to perform and garner recognition (Pope, 2001).
The domain of achievement goal theory includes *mastery* and *performance* goal constructs. In taking a mastery goal approach, one believes that effort and outcome are interrelated. Focus is on the quality of learning, which is intrinsic in nature. There exists a motivation to learn and to grow. On the other hand, a performance goal approach centers on one’s ability and self-worth, which is evidenced by outperforming others, surpassing normative-based standards, or by achieving success with little effort. Public recognition is the ultimate reward and learning is viewed as a means to achieve this desired goal. Because motivation is externally-driven, failure to perform threatens one’s self-concept and can cause significant distress (Ames, 1992).

Occupational prestige in the United States has remained remarkably stable in the past eighty years, with the science, medical, legal, and teaching professions given high status (Hodge, Siegel, & Rosi, 1964). Labaree (1977, p. 26) writes about a social mobility approach to schooling in which “education is a commodity, whose only purpose is to provide individual students with a competitive advantage in the struggle for desirable social position.”

*Future orientation* is a cognitive-motivational occurrence in which individuals anticipate their future and plan their activities to realize goals (Neblett and Cortina, 2005). Adolescents’ perceptions of the rewards and satisfaction of their parents’ professions strongly determine their own future orientation (Neblett and Cortina, 2005). In high socio-economic status communities, it is little surprise that high school students generally strive to be admitted to the highest rated, name brand colleges in order to land the highest paying jobs. Two disconnects are troubling. First, Dale and Krueger (2002)
compared the monetary payoff of attending the more selective colleges and found these institutions did not produce higher earners than less selective colleges. Second, Easterlin (2005) demonstrated that happiness based on economic success alone is not supported by evidence. Marks, Shah, and Westall (2004) supported this concept when they measured that life satisfaction levels in Great Britain have remained flat while economic growth and prosperity has doubled in the last 30 years. Adolescents may be getting the message from home and society that money equates with happiness, and that school achievement is the vehicle to achieve this social status.

The pursuit of happiness is indeed a noble quest and research studies have discovered that happiness, hopefulness, optimism, and contentment appear to reduce the severity of disease, hypertension, colds, and other physical ailments. People with these traits also tend to be less anxious (Paquette, 2006). What factors then lead to happiness? We should again turn to empirical studies. Strong ties to family and friends can produce elevated levels of happiness (Diener and Seligman, 2002), as can achieving a high degree of engagement and meaning through one’s actions (Seligman, 1990). King and Napa (1998) confirm the importance of taking a general perception that meaning in life and happiness are essential to the concept of a “good life” and that money is relatively unimportant (beyond basic needs).

Gilbert (2005) identifies the unique human condition that we spend a great portion of our time in the present thinking about our future. This function is based in the frontal lobe of the human brain. Humans tend to create rosier pictures of the future than the present reality suggests it should. This process is by design because thinking unhappy
thoughts about the future breeds anxiety. The brain gives us an illusion of control by focusing our present actions on steering our lives toward a more desirable future. When people feel they have lost this control, the negative psychological and physical effects can be extreme.

In applying the concept of happiness to the school setting, one can speculate that a high degree of both social and academic engagement will correspond to greater happiness as opposed to those with little connection to peers or school, as well as to those who have been exposed to a substandard learning experience. Looking through Gilbert’s work, students who exert control over their educational and extra-curricular decisions should be better adjusted because of this autonomy.

Stress’ effects on learning and performance

Experiments by Drs. Robert Yerkes and John Dodson (1908) produced a simple curve to display the relationship between stress and performance.

One can note from the diagram that a certain degree of stress is necessary for optimal performance or efficiency (the degree may differ for each individual). Once optimal
performance has been achieved, one’s efficiency plummets as stress or anxiety continues to increase. The Yerkes-Dodson Law has been utilized by educators in the debate of whether academic stress is negatively influencing students; students in distress are described as inhabiting the far right of the curve.

Stress has been linked to a decrease in cognitive functioning. Stress modulates multiple memory systems, favoring “habit” memory over more complex “cognitive” memory (Schwabe, 2007). Although the researcher did not find a decrease in learning performance due to stress (rather, a switch from more complex to more simple learning processes), others have found that chronic stress results in a decrease in hippocampal volume, the area of the brain important to cognition (Gianaros, 2006). More directly related to the school setting, Ashcraft (2002) showed that math anxiety disrupts cognitive processing by affecting working memory in students. Essentially, students who are stressed about an upcoming exam have difficulty accessing the knowledge they possess.

Stress and sleep functioning contribute to a harmful relationship. Stress can decrease the amount of daily sleep adolescents get and a lack of sleep can cause stress due to decreased functioning and alertness (Fuligini and Hardway, 2006). Carskadon (1999) reports that timing of sleep shifts during early adolescence, with bedtime and rising time both occurring at later hours. This is compounded by the biological fact that high-school age students need more sleep—nine and one-half hours—than they did just a few years before as pre-teens (Black, 2000). Dement (1999) at the Stanford University Sleep Research Center pioneered the concept of “sleep debt”, by which individuals accumulate hours of lost sleep when they don’t get their biologically-determined sleep
needs. A high sleep debt (characterized as greater than 25 hours, which includes all waking hours prior to bedtime) has been associated with decreased performance, physical problems, and driving impairment. The importance of this issue for adolescents can be illustrated through sleep’s critical role in memory formation—sleep is necessary to turn the day’s learning into memory (Dujardin, 1990).

With the abundant evidence that sleep is critical to the alertness and learning of adolescents, why do high school starting times continue to center around the period of 7:15-7:45 am? The answer often centers on the financial costs it takes to overhaul bus and athletic schedules (Jewel-on-the-Hill School Start Time Study, 2003) as well as what Wahlstrom (1999) calls the “prickly politics” involved in school boards’ unwillingness to impact the routines of its constituents. Some districts, however, have boldly gone ahead with large-scale starting time changes, most notably Minneapolis Public Schools (MPS). Kubow (1999) studied both the positive and negative reactions from teacher and student perspectives that later starting times (7:15 a.m. to 8:40 a.m.) generated. Further study is needed to determine whether later starting times are actually the panacea that some believe it represents; evidence to date paints an unclear portrait, even though Dement (1999) found adolescents peak alertness to be in early to mid afternoon hours.

An additional manifestation of stress in the school setting is pervasive academic dishonesty in order to survive the academic rigors of high school. Mathews (1999, p.504) defines academic honesty as “integrity in respect to preparing assignments, writing, and other exercises directly related to class or learning activities.” Contrarily, Athanasou (2002, p. 2) offers a simple and direct characterization of academic dishonesty: “The
essence of cheating is fraud and deception.” How can teachers distinguish between these two concepts that inhabit opposite ends of the murky waters yet still seem to obfuscate? Baggaley & Spencer (2005) offer four signs of unoriginal work: it is too good, too long, off-topic, or contains references not cited in the course materials. Teachers in any setting would likely catch these indicators. However, there are various and unique types of academic dishonesty, other than cheating, of which high school teachers must make themselves keenly aware (Whitley & Keith-Spiegel, 2002):

1. **Plagiarism** - deliberately representing someone else’s work or ideas as one’s own.
2. **Facilitating academic dishonesty** – helping someone commit academic dishonesty, such as letting a peer copy homework.
3. **Misrepresentation** – using a false excuse for missing a deadline or a test.
4. **Failure to contribute one’s share to a collaborative effort.**

The social science literature offers a critical message to educators and school administrators with an interest in preventing academic dishonesty. The decisions that students make are not simply based on a person’s sense of right or wrong—i.e. moral fortitude—but rather established by the context of the situation. Decisions appear to be based on what extent the person can rationalize cheating in a given situation (Murdock, Miller, & Kohlhardt, 2004). Examples of situational influences on cheating are numerous. Students are more apt to cheat where the perceived classroom goal structure is one that emphasizes extrinsic rewards for performance (e.g. grades, social comparisons) as compared to the mastery of content (e.g. improvement, growth, effort) (Murdock et al.,
2004). Also, students are more apt to cheat where the perceived competence of the
teacher is low (Murdock et al., 2004). The types of assignments teachers give can
influence the likelihood of cheating. Students are more likely to cheat when preparing
assignments as opposed to taking exams (Baggaley & Spencer, 2005). Additionally, the
degree to which assignments are engaging can determine whether students decide to
cheat (Murdock et al., 2004). It is believed that highly stressed students are more apt to
resort to academic dishonesty to keep up with school demands (Pope, 2001).

**Stressors**

Identifying the culprits in the stress problem must include a critical analysis of
both the home and school environments. Attention on the home focuses on the messages
parents send to their children on what is most important in their schooling, particularly
the expectations on academic performance. It also includes how personal technology has
intruded into the environment. Attention on the school spotlights homework policies, the
ways in which schools sort its students, and the degree to which teachers engage their
students in learning. The extra-curricular activities students subscribe to, the pressures
associated with college admissions, and the school’s structural focus on grades and
rewards are other important variables to consider.

**Stressors from home**

It’s all about the parents [dummy]!

- Student at Jewel-on-the-Hill High School (as spoken to the author)
While the term “helicopter parenting” may be new to the high school scene, the concept of heavy (and usually well-meaning) parent involvement in their child’s educational experience is not new. This hovering has extended onto the college campus. A recent National Survey of Student Engagement survey reported 86 percent of first-year college students were in frequent contact with their mother via phone or computer. The same survey found 38 percent of students had parents who sometimes or frequently intervened with college officials their behalf (Fortin, 2008). Kohn (1998) describes such parents as sometimes being resistant to school reform, sacrificing other children to their own and mortgaging their own children’s present to the future.

Parents do play a critical role in the academic development and achievement of their children, especially during the early years of high school (Hickman et al., 1995). Parental values can also strongly influence the values and educational goals of children (Kohn et al., 1986; Kerckhoff and Huff, 1974). To raise achievement, parents are advised to foster self-direction in their children in order to facilitate cognitive development (Miller et al., 1985), communicate positively with the school, participate in or attend school activities, and assist in setting a home environment conducive to homework completion (Singh et al., 1995). However, when the focus of school attendance is strictly on performance and achievement becomes a condition for acceptance and support, these factors can produce extreme pressure that can drive adolescents into serious psychological distress (Levine, 2006).

A visit to an American high school will illustrate how “plugged in” teenagers are these days. The pervasive use of personal technologies—cell phones, iPods, digital
cameras, Blackberrys—has created a new challenge for schools in maintaining the learning environment. These devices dramatically aid social and home networking, and can even have educational benefits. But what effect does near constant use of technology have on the stress levels of adolescents? Research has yet to provide an answer to this vexing question.

According to the Pew Internet and American Life Project 2006 survey, 94 percent of youth are online (an increase from its 2004 report); parents show similar Internet usage rates. While the vast majority of teenagers report personal technologies make their lives easier, parents are becoming increasingly uneasy about their children’s technology usage (Macgill, 2007). This is likely due to the widespread use of social networking Internet sites such as Facebook and MySpace, as well as blogging. Friendship is identified as the major preoccupation of online teens and young adults. However, these virtual communities provide no guarantee people truly are what they present themselves to be (e.g. adults masquerading as teenagers) (Rosen, Cheever, and Carrier, 2008). Another source of social networking is for teens to share artwork, journals, or other personal expressions with known and unknown web surfers (Lenhart, Madden, Macgill, and Smith, 2007).

While the research on the impact of personal technologies on youth is sparse, two effects can be identified. First, technology can blur the boundaries between real and fantasy, and between personal role and student/learning role (Weil and Rosen, 1997). Because a simple text message can spark a spontaneous interaction between two people, youth rapidly move in and out of school and home (or student and family) roles as well as
reality and hypothetical contexts. The back and forth transitions appear seamless, but it can create disturbances to one’s productivity and well being (Weil and Rosen, 1997).

When an interruption due to personal technology happens, and how often and how complex it is, can dramatically affect how detrimental the break will be on learning or productivity. Interruptions at natural break-points most likely will cause minimal disruption. However, the more intellectually demanding an interruption is, the more likely one is to not remember what one was doing before interrupted. Interruptions in the middle of listening or reading disrupt the process of coding information from short-term to long-term memory (Begley, 2009).

A second effect that personal technology can have on adolescents is when usage at home is on par with time spent on homework. The Stanford Survey of Adolescent School Experiences found personal technology use to be upward of 3.5 hours daily for many high school students (Pope, 2007). Add an equal amount of homework and extra-curricular activity participation, and it is little wonder the survey found such high levels of psychological stress.

As has been the case with adults, the use of personal technologies—for entertainment and productivity purposes—has outpaced studies on technology’s effects on mental well-being. Given the uniqueness of the adolescent period of development and the pervasiveness of personal technologies in the school setting, there is an urgency for this type of research.
Stressors from school

The debate over homework has polarized conversations about student stress in schools and has led to emotional pleas from parents for less homework, and has led to a degree of defensiveness by teachers. Corno (1996) aptly frames the issue when calling homework “a complicated thing.” The American discourse on homework has been taking place for more than a century and a half. Gill and Schlossman (2004) reviewed the passionate views (pro and con) on homework’s importance over time. Homework has generally been supported by parents throughout the last century. Also, the ebb and flow nature of attention on homework tends to correspond to national or world events (e.g. increased value and attention given to homework post-Sputnik and post-*A Nation at Risk*). Homework policies may be slow to change, but history proves they are not immovable.

There is little debate among researchers and practitioners that homework can have positive effects on achievement at the secondary school level (Cooper, 2006). However, the optimum amount of homework is more contentious, ranging from Kohn (2006) calling for the elimination of homework altogether to Bempechat (2004) trumpeting the motivational benefits of homework. Regardless, homework can lead to a stressful experience for many students, particularly females, and to “homework wars” at home (Kouzma and Kennedy, 2002; Galloway and Pope, 2007). To mitigate this stress and to foster learning, teachers have been called upon to redesign homework assignments to have more purpose, creativity, and flexibility (Epstein and Van Voorhis, 2001). Schools
can establish policies that value homework for all courses, but establish limits on how much teachers may assign on a nightly basis (Cooper, 2001).

Sizer and Sizer (1999) point to the various ways schools sort its students by academic and social means. Tracking is an example of this. While some positive aspects of tracking can be identified for the individual (e.g. ensuring challenge), this practice is often politically controversial, seen as profoundly discriminiatory, and has been labeled as ineffective toward learning (Sizer and Sizer, 1999). Honor rolls, class ranking, cut policies in athletics, free and reduced lunch lines, and the way students group themselves in cliques are all additional examples of sorting.

Tracking is often cited as a way to foster students’ engagement in learning, or achieve what Csikszentmihalyi (1990) calls flow. Students report that a lack of engagement in the classroom can lead to stress and a decrease in motivation to learn (Galloway et al., 2007). High-stakes testing, as mandated by No Child Left Behind, can inhibit engagement and also serve as a stressor to both students and teachers (Schroeder, 2006). To limit academic stress, schools try to achieve stage-environment fit, by matching the needs of developing adolescents with opportunities to learn in an environment conducive to engagement (Eccles et al., 1993).

No Child Left Behind and its high-stakes testing component can drive teachers toward “teaching to the test”. This narrows the curriculum substantially, and thus students are exposed to only a slice of what a truly “comprehensive” curriculum would look like (i.e. experiential learning, collaborative activities, vocational training, etc.). The standardized tests do not measure multiple intelligences and are minimally sensitive to
different learning styles. This fact strongly inhibits a school’s desire for stage-environment fit for its students.

A frequent argument in the stress problem debate is that today’s students are “over-scheduled”—meaning their days are chock full of structured extra-curricular activities (school and non-school related) and this overcommitment negatively affects their psychological well-being. Jones and Ginsburg (2006) promote the value of free time to facilitate relaxation and opportunities for students to discover their own interests and talents. Dr. Alvin Rosenfeld (2000) believes that enrolling children in too many activities has become a nationwide problem.

While there is growing concern about heavy participation in extra-curricular activities, there is research that point to the positive benefits of this involvement. Marsh (1992) found via a study of high school students in Australia that participation in extra-curricular activities increased students’ commitment to school. Gerber (1996) correlated participation by eighth graders in extra-curricular activities to increased academic achievement (and school-related activities were more strongly associated with achievement than non-school activities). Mahoney and Cairns (1997) suggest that participation can also protect youth from early school dropout (failure to complete 11th grade).

Through their empirical studies, Luthar, Shoum, and Brown (2006) see extra-curricular involvement among affluent youth as a scapegoat for the “ubiquitous achievement pressure” inherent in upper middle class suburban communities. They see modest links to the number of hours children spend in sports, arts, academic, and civic
extra-curricular activities with psychological maladjustment. They believe negative effects from heavy participation lie in the children’s perceptions of their parents’ attitudes toward achievement (i.e. do parents pressure their children to participate in these activities as a way to “get ahead” or stay competitive for college admissions?) (Luthar et al., 2006). One could speculate that the degree of student interest in their activities partly determines the level of stress they experience living such a busy schedule. This concept deserves empirical study. It is unclear to what degree today’s youth choose their activities based on interest alone, and how such a choice affects perceived stress levels.

In a way, college admission is the tail that wags the dog for suburban high schools. Students appropriately place high value on acceptance to institutions of higher learning and many choose a rigorous high school curriculum in order to gain admissions to the most elite colleges. This goal can indeed push students to successfully meet new challenges and to grow significantly. However, focusing on getting into the “right, name-brand college” can drive students into a performance-oriented approach to their high school experience, one centered on getting the highest grades possible in the most difficult courses, overfilling their schedules with activities, and creating a persona that makes them stand out among peers (e.g. “I’m special because…”). This approach inevitably results in highly stressed teens (Pope, 2001).

College admission offices complicate the matter by sending conflicting messages to high school students. A popular message is that the college admission process should center on choosing the right “fit” for the student. Bruce Poch, Dean of Admissions at Pomona College, looks for “authenticity” in his applicants. He wants to see beyond the
professional packaging done by the numerous college consultants employed by students (Poch, 2007). Other colleges tell students the highly selective admission process necessitates a near perfect high school transcript (i.e. a performance focus). Colleges may outwardly look for “the best” or “the most qualified”, but ultimately, they admit the students who they want most, those who will earn degrees at their institutions, stay engaged as active alumni, and represent the demographics they are looking for. This disingenuous approach often leads applicants (the vast majority who will not get in) to feel special leading up to decision time and then unworthy after getting a thin and vague denial letter (Marthers, 2005).

No other publication geared toward college admissions is more eagerly anticipated than the annual *U.S. News and World Report* issue of college rankings. Colleges become hypocritical when they trumpet their lofty attention to the pursuit of knowledge while at the same time selling their souls by manipulating aspects of their school profiles (e.g. percentage of admission denials, money spent on research, total endowment, etc.) to gain a higher ranking in this publication (Thacker, 2005). The current movement by Lloyd Thacker’s Education Conservancy to eschew the ranking game is highly encouraging—by the fall of 2007, 65 presidents of colleges and universities had agreed to stop sending *U.S. News and World Report* their demographic information (The Education Conservancy, 2008).

There exists a deluge of advice for prospective college students that youth must sort through. There are many approaches to navigating the application process, but young people should start by carrying a reality-based perspective on the quality of today’s
higher education landscape. While the culture often promotes the myth of only twenty or so colleges worth attending—the “Gotta-Get-Ins”—the reality is that the difference between the super elite and the next few tiers of schools is smaller than ever (Easterbrook, 2004). Families should resist the marketplace mentality of college admissions and realize that college (like all of life) is what one makes of it (Thacker, 2005). This is where one gets back to the concept of best fit for a student, based on the size, resources, location, and mission of the institution. Hersh (2005) writes to students to make the college experience about them (and not what their family wants or what the media says they should do). This means finding a college that will foster individual interests, provide meaningful interactions with peers and professors, and allow students to be true to their wants and needs.

The college admission process not only has implications for students and their families, but also for high schools. Most suburban high schools are college preparatory in mission, offering little in the way of vocational training. Conley (2007) defines “college readiness” as the level of preparation one needs to enroll and succeed—without remediation—in the college of choice. He calls for an expanded conception of college readiness to better prepare graduates for success in college. This requires defining college readiness in a fundamentally different way than just the traditional definition of “high school competence” (based on course titles, grade point averages, and national standardized tests). Conley (2007) provides four facets of college readiness:

- **Key cognitive strategies:** the development of patterns of intellectual behavior that lead to the development of cognitive strategies and capabilities necessary
for college-level work. Examples include intellectual openness, inquisitiveness, analysis, reasoning, argumentation, proof, interpretation, accuracy, and problem solving.

- **Key content:** exercising broader cognitive skills through specific content knowledge. Two academic skill areas are central to college success: writing and research. Core academic subjects include English, math, science, social studies, world languages, and the arts.

- **Academic behaviors:** a range of behaviors in the social and emotional competencies domain, such as self-awareness, self-monitoring, and self-control, as well as a mastery of study skills.

- **Contextual skills and awareness:** the privileged information necessary to understand how college operates as a system and culture. Specific skills such as the ability to collaborate in teams, understand the norms of academic culture, and how to interact with professors or those from different backgrounds or cultures, are central to college success.

A typical high school mission statement may include statements about a “love of learning” and a focus on intellectual and social *growth* over mere achievement. Also typical is a structure that primarily defines achievement and “progress” through the use of numerical grading systems—which are inherently flawed because of the subjectivity of individual teachers and from a lack of consistency between teachers. Awards, rewards, and other recognition are usually grade-based (e.g. honor roll, National Honor society, class rank, etc.). Covington (1999, p.127) identifies this hypocrisy in today’s schools,
“Given this selective-sorting function of schools [via grades], it is little wonder that many students become preoccupied with grades, especially because grades not only largely determine future occupational placement but are also judged indicative of the individual’s personal worth.” Even more troubling, sometimes grades are the sole basis for punishment in some classrooms.

Rewards et al. create an obstacle to valuing learning because they are extrinsic in nature and thus unrelated to the act of learning itself. The risk is that learning becomes a means to an end, where the focus is on achieving a high test score rather than subject-matter or skill-development appreciation. The negative impact of rewards is exacerbated because there are usually so few given out in school or class. The ultimate consequence of receiving or not receiving rewards is that students may depend on these extrinsic rewards for self-definition (Covington, 1999). When young people define their worth on such terms, failure to achieve recognition can be particularly devastating to their mental well-being.

Covington (1999) offers two approaches for students that can be deemed more healthy as well as fostering an appreciation of learning: (1) developing a more holistic definition of success to include meeting challenges, growing socially and emotionally, and developing specific skills in the school setting; and (2) fostering behaviors or reasons that make learning fun, such as curiosity, the pursuit of personal interests, active discovery, wonder, service, and compassion. Teachers can also play a pivotal role in helping students feel okay when they do not fully meet their achievement goals by being enthusiastic about the subject matter, giving students some choice and control over their
activities, and by directly reinforcing the positive reasons for learning (Covington, 1999). The standards-based assessment movement that is currently in vogue provides hope of moving schools away from the grade-based achievement structure.

Summary of theme

Stress is rooted in physiology, but is most relevant to today’s youth through the psychological. When a life situation is perceived as stressful, both mental and physical health can be negatively affected. In the school setting, when the basic needs of mental and physical well being are not met, learning suffers. Chronic stress can have long-lasting effects on young people.

Stressors come from many sources: home, self, school, college, peers, and other places. While a “stress culture” can exert pressure on all members, the source of stress and its negative affect is largely dependent on the situation and the makeup of the individual. To address stress, one identifies manifestations of stress, looks for its source(s), and then takes action to address it. This concept of action will form the final section of this chapter.

IV. Stress Management & Coping Strategies

I can’t express anger. I grow a tumor instead.
- Woody Allen
Wellness and resiliency

In life, one ultimately searches to be well, both mentally and physically. Sadly, so much of society’s resources (and school’s monies) are spent helping individuals cope with mental or physical problems. There is general agreement among medical professionals about what constitutes “healthy living”, such as good diet, regular exercise, positive social engagements, a sense of meaning and purpose, adequate sleep, and skills for adapting to the challenges of a changing environment (Compton, 2005; Dement, 1999). The concept of resiliency—being able to rebound from an acute difficulty—is increasingly gaining the interest of schools to help adolescents cope with stress.

Ginsburg (2006) identifies the “7 Cs of resilience”, interrelated components that each can be cultivated to improve one’s ability to bounce back from adversity or stress:

- Competence: the ability to handle situations effectively, gained through actual experience.
- Confidence: a solid belief in one’s own abilities, rooted in competence.
- Connection: close ties to family, friends, school, and community.
- Character: a fundamental sense of right and wrong that forms the basis for decision making.
- Contribution: understanding the importance of a sense of purpose to one’s life.
- Coping: employing specific strategies to cope with stress.
- **Control**: an internal drive to make decisions and take actions to manage one’s life.

Ginsburg (2006) describes the interrelatedness of the 7 Cs in the following way:

Children need to experience *competence* to gain *confidence*. They need *connections* with an adult to reinforce those points of *competence*. They need *character* to know what they should *contribute* to their families and the world, and *character* is forged through deep *connection* to others. *Contribution* builds *character* and further strengthens *connections*. Children who *contribute* to their communities gain *confidence* as they feel more and more *competent*. All of this leads them to recognize that they can make a difference and change their environments, and this gives them a heightened sense of *control*. Children with a sense of *control* believe in their ability to solve problems so they will more tenaciously attack a problem until they find a solution. This newfound area of *competence* then enhances their *confidence*, which will be used the next time they need to reinforce their beliefs in their ability to *control* their environment. And so on. (p. 27)

**Managing stress**

While it has been established that the “stress of life” is unavoidable, one does not have to accept that negative consequences from stress are fait accomplit. In looking at stress management, it is helpful to view stress through a model of cognitive appraisals and emotional and physical reactions (Greenberg, 2008).
Stress begins with a “life situation” (i.e. stressor) that knocks you out of rhythm and into a state of disequilibrium. We know that individuals view stressors through their unique perspectives and place varied importance on life events. The degree to which someone perceives the life situation as stressful will determine its impact. If the impact is significant, it will cause an emotional reaction, such as anger, anxiety, fear, or a sense of being overwhelmed. This emotional arousal will in turn trigger a physical response (as laid out in the physiology of stress section of this chapter). Blood pressure may increase, digestion may be disrupted, or the immune system may be compromised, among other responses. This, of course, leads to negative physical or psychological consequences (such as doing poorly in school) (Greenberg, 2008).

The concept of learned helplessness was presented earlier in this chapter as a debilitating condition in which adolescents learn to fully depend on others to help navigate life’s challenges; they become incapable to exerting control on their behavior in certain situations. On the opposite side of the control spectrum is learned resourcefulness, which Akgun and Ciarrochi (2003, p. 287) define as “a set of skills for regulating internal events such as emotions that might otherwise interfere with the smooth execution of a target behavior.” In a study of 141 first-year undergraduates, they
revealed that academic stress was negatively associated with academic performance and that learned resourcefulness acted to moderate this negative association.

Aspinwall and Taylor (1992), in conducting a longitudinal study of over 600 college freshmen, found students did much better in school when “active coping strategies” (e.g. seeking support) were utilized rather than “avoidant coping strategies”. What one should take from these studies and others is that stress can be reduced if the individual exerts control over his or her reaction to it.

Stress coping strategies

Greenberg (2008) views a comprehensive intervention process as one that provides multiple entry points into the stress model. He describes the method as putting up “roadblocks” throughout the steps in the stress model in order to minimize stress reactions. Rather than employ a few stress management techniques, he advocates using several means at each level to prevent the negative consequences that stress can produce. The subsequent parts of this section will briefly outline various coping strategies that have proven effective, ranging from controlling one’s emotions to more aggressive physical techniques. It is important to remember, however, that what works for one person may not work for another. It is up to the individual to find out what works best for them.
Intrapersonal

Because the impact of stress is so individualized, it makes sense to start with an introspection of one’s lifestyle choices. “Life situations” are at the top of the stress model and applying techniques here can act as preventative medicine. One begins by reflecting upon and eliminating as many stressors (e.g. over-commitment to extra-curricular activities) in one’s life as feasible. Practicing good nutrition, keeping one’s weight down, and reducing the amount of noise in one’s life can also be viewed as preventing the kinds of problems that poor health and a chaotic life can create (Greenberg, 2008).

Interpersonal

Most days are filled with numerous interactions with other people, including some that are confrontational. Asserting oneself in situations—expressing oneself and satisfying one’s own needs without hurting others in the process—appears to have a significant positive impact on stress levels (presumably because of stress’ relationship to control). One can be assertive verbally as well as nonverbally (e.g. posture), and the central theme here is communication. Positive and effective communication leads to the development of quality relationships, which mitigates stress. An additional interpersonal strategy is to not let conflicts fester, but to work toward resolutions (Greenberg, 2008).

Time management and organization are crucial skills for students. To reduce the feeling of being overwhelmed, adolescents should take care to assess how they spend their time, set goals, prioritize tasks, say ‘no’ to some requests, and limit interruptions (Greenberg, 2008). In doing so, they may find they can handle a hectic schedule of school
and social commitments. MacGeorge, Samter, and Gillihan (2005) associated “supportive communication” (attentive listening, sympathy, expressions of affection, as well as informational support and advice) positively with decreased stress in university students. It is clear that how we interact with others plays a significant role in exacerbating or relieving stress.

Perspective and attitude

The second stage of the stress model requires a cognitive appraisal of the stressor, or life situation. The perspective and attitude we take into the assessment is critically important (e.g. the cliché: “perception is reality”). The focus starts with what we chose to be aware of. We may not like our current job or where we live, but we can also choose not to dwell on these items if we have little control over them. This approach is termed “selective awareness” and is often accompanied by looking at situations through a more positive or optimistic attitude (Greenberg, 2008). Huan, Yeo, Ang, and Chong (2006) studied several hundred high school students in Singapore and negatively associated optimism and academic stress in students. An optimistic disposition acted as a buffer against the effects of stress while a pessimistic attitude provided no positive effect.

While part of our brain (the frontal lobe) spends up to one-quarter of our time generating thoughts about our future (Gilbert, 2005), we often do not fully appreciate the present. “Stopping to smell the roses” or taking the time to enjoy the experience of an experience (such as school) helps us appreciate the fullness of our lives (Greenberg,
2008). This, of course, requires a degree of self-discipline to fight the desensitization of the routine of daily experience.

Several other attitudinal strategies can help mitigate the emotional impact life situations can have. Expressing gratitude helps others feel better as well as ourselves. So does finding humor in everyday events (of which there is abundant supply)—many people find laughing to be cathartic in nature, perhaps explaining the multi-billion dollar comedy industry. Controlling our tendency to hurry through tasks or be hostile and aggressive (the bad side of assertiveness) also helps mitigate our stress. Finally, maintaining a feeling of being in control of events that affect our lives (locus of control) can help us see stressors as challenges within our control rather than things that will hold us hostage until they pass. Being committed to resolving these challenges builds our resolution and hardiness (Greenberg, 2008). A practical example of this could be overcoming the anxiety associated with public speaking—as one is repeatedly exposed to this stressor and works to improve skills, the stressor diminishes over time.

Researchers have spent considerable time studying how college students cope with stressful academic events. Struthers, Perry, and Menec (2000) used the Problem-Focused Coping (PFC) and Emotion-Focused Coping (EFC) framework established by Folkman and Lazurus (1980) to show that students who used the PFC approach were likely to be more motivated and perform better in school than those using the EFC mindset. Students using the PFC approach believe stressful events can be altered or controlled by using thoughts or strategies to lessen stress’ impact. Alternatively, the EFC
approach carries a belief that certain stressors must be endured rather than directly challenged, which leads to actions aimed to minimize or reduce the threatening event.

Spirituality and service

Subscribing to a higher purpose has long provided a foundation for mental well-being for many people. Spiritual health can be viewed as adhering to religious doctrine or by simply valuing and expressing one’s purpose in life, to love fully and to journey toward personal fulfillment. Many people find that forgiving others for past transgressions can liberate the stress associated with conflict or poor relationships. Additionally, giving one’s valuable time, effort, or money in the name of service can have a similar effect (Greenberg, 2008). Mandatory community service programs have become popular in many high schools nationally.

Relaxation techniques

Relaxation techniques respond to the emotional arousal stage of the stress model by acting as an intervention between stress and illness and disease (Greenberg, 2008). One such technique that has become popular in Western culture is meditation. A slew of meditative practices—mostly originating from the Far East—have helped individuals be more attentive to present situations or take a more optimistic approach to life’s challenges.

Benson (1975), in practicing a form of autogenic meditation (imagining oneself in a different physical state), described the “relaxation response” as the physical opposite of
the stress response. While the classic stress response increases metabolism, blood pressure, and rate of breathing, the relaxation response provided a counteraction by lowering each of these physical responses. Benson also showed psychological benefits by increasing one’s feeling of calmness and control.

Biofeedback (using instruments to measure physiological changes produced by stress), deep diaphragmatic breathing, body scanning (searching for relaxed parts of one’s body), massage, acupuncture, yoga, stretching, tai chi, the use of music, and interacting with pets have all proven useful relaxation techniques to many people (Greenberg, 2008). Brown and Ryan (2003) showed empirically the power of mindfulness (being conscious and paying attention to the present) in enhancing self-awareness, promoting self-regulated behavior, and producing positive emotional states. Again, the key is to find which methods are most effective to the individual.

Physical exertion

Intense physical intervention through exercise provides relief from stress for a multitude of people. “Letting it all out” through exercise can be an effective way to handle emotions as they build up. This approach differs from relaxation techniques and other approaches in that exercise is a means of using the physical responses to stress—increased heart rate, muscle tension, etc.—so they do not negatively impact your health. Exercise can also act as a method to focus one’s attention away from the stressors at hand (Greenberg, 2008). The benefits of exercise to physical health are obvious, but psychological gains have also been identified. This includes better self-esteem from
feeling fit, feeling more alert and able, and decreasing feelings of depression and anxiety. These feelings happen because the brain releases opiate-like endorphins during exercise, which decrease pain and produce feelings of well-being (Greenberg, 2008).

*Implications for schools*

If stress management should be viewed comprehensively via the multi-stage stress model, then schools wishing to address student (or adult) stress should tailor its approach in a similar fashion. Schools should recognize its primary function of *educating* and *engaging* students on both academic and social and emotional content—this should include sharing knowledge about stress. Social and emotional learning (SEL) has sometimes been described as “the missing piece” of the high school curriculum; its importance is found because SEL links academic knowledge with specific skills important to success in school and in life (such as knowing yourself and others, making responsible decisions, and knowing how to act) (Elias, 2006). Schools can also provide multiple opportunities for students to practice stress management techniques, ranging from intrapersonal and interpersonal approaches to attitudinal mindsets to physical exercises.

Stanford’s Stressed-Out-Students Project has provided guidance to over sixty public and private high schools in the country (predominantly within California, however) (Pope, 2007). In March, 2004, an interdepartmental advisory board at the university designed a conference entitled, “SOS—Stressed-Out-Students: Helping to Improve Health, School Engagement, and Academic Integrity”. The purpose of this
gathering was to initiate dialogue about academic stress and help practitioners, parents, and students (via teams) to address the problem back in their school communities (Galloway et al., 2007). Each subsequent year, requests for participation in the annual conference grew.

Some public and private schools in the northeast have enlisted the Benson-Henry Institute (BHI) for Mind-Body Medicine at the Massachusetts General Hospital to provide stress reduction workshops in the school setting to students (Porter, 2007). BHI has worked with both inner city and suburban schools to develop students’ capacity to cope with their stress, which can be notably different in source for these two demographics (Jan, 2008). The organization has conducted extensive studies at the high and middle school levels and associated improved academic performance and increases in positive psychological characteristics through the use of the relaxation response curriculum (Benson et al., 2000; Benson et al., 1994). The David Lynch Foundation provides research and support to schools through Transcendental Meditation programs (David Lynch Foundation, 2008).

Other schools have viewed their very structure as a root cause of stress. Hardy (2003) highlighted efforts by some large schools to break students down into smaller cohorts in order to better personalize the school experience, believing that closer relationships between students and adults will reduce stress. A school’s curriculum can also be viewed through a stress lens. McCraty et al. (1996) associated the effects of music and positive emotional states on improved immune system functioning. Curry and Kasser (2005) showed that coloring mandalas (a plaid form) reduced anxiety in
undergraduate students; De Petrillo and Winner (2005) supported the benefits of artmaking by showing that those who drew exhibited better moods through either catharsis or redirection. These studies point to the positive impact that arts, music, and physical education curricula can have on students. This notion is especially noteworthy in today’s school climate where arts, music, and physical education programs are underappreciated and often the first to be cut when budgets get tight.

**Summary of theme**

Stress can be traced to a source, and it can be acted upon to restore a person’s equilibrium, health, productivity, and happiness. The most effective technique to address stress is dependent on the individual (i.e. people choose strategies that work best for them). Stress-coping strategies can be found in the realms of psychology, physiology, and spirituality. Multiple techniques can be utilized for a more comprehensive response to purge stress hormones from the body.

V. Major Influences on the Study

Dr. Denise Pope of Stanford University has provided technical assistance as well as spiritual guidance for the Stress Reduction Committee. She is feverishly and courageously filling a huge void that exists in academic stress research, particularly at the high school level. Dr. Pope, and her colleagues at the SOS Project, has been the driving force behind the researcher choosing this study topic.

Jewel-on-the-Hill’s relationship with the Benson-Henry Institute for Mind-Body Medicine (BHI) has been a blessing. The researcher has been able to visit the facility on
several occasions and the resulting partnership with the school has been fruitful. BHI’s thirty-plus years of research has helped shape the theoretical landscape of the study.

The researcher is fortunate to be studying a phenomenon that has been widely popularized in print and other media. The coverage has provided healthy debate on the subject and offered new lenses to look at the problem.

Finally, the relevant research has positively affected the coding, data collection, and other elements that will be outlined in subsequent chapters. It has guided the researcher in which components have a strong link to academic achievement, and thus, what may be most relevant to the issue at study (for example, the type of data he wished to collect from participants). The relevant research has also helped guide him as leader of the stress initiative, specifically through providing a leadership framework and focus.
Chapter Three

Research Design

I. Introduction

“Examining and addressing academic stress at a suburban high school” was an ethnographic descriptive case study (Merriam, 1998), focusing on the culture of the high achieving Jewel-on-the-Hill High School (fictitious name), as well as its beliefs, values, and attitudes that shaped the behaviors in this culture. The study focused on what the researcher learned as a participant-observer during the planning stages of the Stress Reduction Committee’s (SRC) work to examine the stress problem—believed to adversely affect student health and learning. The study also considered the actions taken as the Committee implemented changes to address the problem. The school’s larger community, a suburb in a New England city, was the setting for the study.

II. Research Questions and Design

The study attempted to answer four research questions as the Stress Reduction Committee completed its beginning efforts to examine and address the student stress problem:

(1) How did the Stress Reduction Committee analyze and name the student stress problem?

(2) What were the challenges encountered by the faculty, parent, and student members of the Committee during its work on the student stress problem?
(3) What were the new learnings of the Committee during its work on the student stress problem?

(4) What were the school-wide results of the planning phase of the project?

The first three research questions are considered non-causal descriptive, meaning that the data analyses leads to simple descriptions of what was observed between variables. The fourth research question is considered causal descriptive. In this instance, the description includes a causal link between the results of the SRC and its efforts toward that end (Miles and Huberman, 1994).

The design of this study followed a typical qualitative case study model. It sought a rich description of the complexity of leading school change and the interaction of multiple variables and influencers on the process. The qualitative case study was the best model for two reasons: (1) this study did not analyze and synthesize numerical data, statistics, etc., and (2) this study was bound to a single site context, and does not study a larger, uncontained population. The study employed qualitative methodologies for collecting data as well as for analyzing and reporting the data. These protocols are laid out in detail later in this section.

The case study design allowed the researcher to gain a deep understanding of the student stress problem in the particular context of the high school environment. The process taken by the Stress Reduction Committee, including intra-group interactions—was of greater emphasis than the outcomes the group achieved. Merriam (1998, p. 41) offers the case study as “a means of investigating complex social units
consisting of multiple variables of potential importance in understanding the environment.”

III. Research Methodology

This qualitative case study described and assessed a project in which a representative Stress Reduction Committee of parents, teachers, and students participated in an exploration of an academic stress problem on students. The researcher led this group as a participant-observer; he was also principal of the school. In recognizing these dual roles of leader of the committee and leader of the school, there was the potential for positional ambiguity and possible bias as an observer (Miles and Huberman, 1994).

Qualitative data bring distinct strengths to a study. A significant feature, as described by Miles and Huberman (1994), is that it focuses on naturally occurring, ordinary events in natural settings. Additionally, qualitative data can lead to rich, thick discussions that have the potential to reveal the complexities inherent in school settings. The field of education is a “lived experience”, which lends itself to an inductive mode of inquiry, where the researcher builds abstractions, concepts, and hypotheses rather than testing existing theory (Merriam, 1998). Sherman and Webb (1988) describe qualitative researchers being interested in understanding the meaning people have constructed—how they have lived or felt in their experiences. It is not the researcher’s perspective that is most important, but rather those of the participants (Merriam, 1998).

Patton (1985, p. 1) further explains:
Qualitative research is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting—what it means for participants to be in that setting, what their lives are like, what’s going on for them, what their meanings are, what the world looks like in that particular setting—and in the analysis to be able to communicate that faithfully to others who are interested in that setting.... The analysis strives for depth of understanding.

As was the case in this study, data collection typically occurs over an extended time period, which allows the researcher to present more than a snapshot of a culture or phenomena (Miles and Huberman, 1994). In qualitative research, the researcher is the primary instrument for data collection and analysis; data collection usually takes place in the field (in this case, a high school setting) (Merriam, 1998). In this study, the researcher was an active participant in the Stress Reduction Committee. As a result, his role as a participant supercedes that of his observer activities. In this type of situation, the level of confidentiality promised to the group of participants may result in a diminished depth of the information they reveal (Merriam, 1998).

The qualitative researcher must be both a good communicator and listener. The researcher needs to develop a good rapport with the participants in order to develop an atmosphere of trust within the study, thus allowing the investigator to ask purposive
questions that will gather the best data. Noting who says what, and in which context, can provide the researcher with additional useful data (Merriam, 1998).

To provide background data prior to the design of this study, pre-intervention data sources were used, including a student survey given in February 2006 to approximately eleven hundred students at the high school. Casual dialogue with parents often illustrated serious concerns about a stress problem—primarily the level of stress, the amount of homework, and unhealthy coping mechanisms parents were seeing at home. Conversations with school counselors and nurses at JHS, as well as with administrators at neighboring schools, pointed to an increase in cases of serious health problems among students. There were also concerns about the degree to which students were learning and retaining knowledge. This “local” data added to a growing body of research and literature on adolescent stress.

The three study participant sub-groups allowed for both within-case and cross-case analyses, where useful. In the first stage of analysis, each case was treated as “a comprehensive case in and of itself” (Merriam, p. 194). Once the analysis of each case is finished, and the researcher learned as much about the context as possible, the cross-case analysis began. In doing so, the researcher attempted to build abstractions or concepts across cases. In this study, the participant-observer looked at similarities and differences, themes and connections, as well as examining other variables, to build what Yin (1994, p. 112) calls “a general explanation that fits each of the individual cases, even though the cases will vary in their details.” In doing so, the researcher was able to develop more influential descriptions of the context at hand (Merriam, 1998).
IV. Sample

Description of school and community

Jewel-on-the-Hill High School (JHS) educates 1400 students across four grade levels; it employs approximately two hundred people, filling the roles of teachers, administrators, counselors, and support personnel. Eighty-nine percent of the student body was ethnically classified as “white” according to the state’s Department of Education criteria. African-Americans, Latinos, and Asians represent a minority population in equal proportions at the school. JHS is a college preparatory school and shows pride in its 93 percent four-year college acceptance rate for the Class of 2007.

The school resides in an affluent commuting suburb several miles outside of a major metropolitan area in New England; it has a population of just under 20,000. The community is generally considered a desirable place to live and to raise children. According to OnBoard LLC data, the town’s average single property value—over half a million dollars—is more than double that of the state’s average. In addition, over one-quarter of its adult residents hold at least a Masters degree. The community places a high value on formal education and holds its one high school, one middle school, and five elementary schools to high expectations for the achievement of its 5000 students.

The high school consistently achieves among the highest scores on the state tests—over 90 percent of its students received “advanced” or “proficient” ratings on the 2007 math and English exams, more than 20 percentage points higher than the state average—and Scholastic Aptitude Test (SAT) results on par with other high-achieving
schools. Each year, Jewel-on-the-Hill High School’s students are very competitive with their peers nationally for acceptance to highly selective colleges and universities.

The Stress Reduction Committee was formed in spring, 2007 and given the charge of examining and addressing the academic stress problem at the high school. Student, staff, and parent members of the community volunteered to participate on the committee when the principal solicited interest. (All individuals interested in joining the committee were accepted as members.) The Committee worked in a collaborative way toward meeting several goals, all of which aimed to address the stress culture at school or at home. This work was referred to as the “leadership project” by the researcher.

The subjects of this study were eight of the sixteen members of the Stress Reduction Committee. This exact number was determined in an effort to gather a useful quantity of qualitative data, while at the same time not creating an unwieldy amount of information. Participants were invited to join the study via a private meeting with the researcher and chosen in order to create a group with a diversity of perspectives and experiences, as well as to enhance the researcher’s ability to better understand the issues under study (Gay, Mills, & Airasian, 2006). All participants invited to participate in the study accepted the request. Each member signed a form giving consent. Confidentiality was maintained at all times and teacher participation in the study in no way influenced their performance evaluations or job status.

The makeup and structure of the Stress Reduction Committee was designed to bring fresh ideas and a variety of perspectives to the initiative. The selection of the study’s sample mirrors this intent and aimed to create a group from which the researcher
could draw from a wide range of beliefs, opinions, and observations that would help answer the research questions and foster his own learning. This approach in choosing a small sample made it “purposive” and “nonrandom” (Merriam, 1998).

The sample consisted of three sub-samples: three student members, three teacher members, and two parent members. The individuals were considered typical members of the Stress Reduction Committee. Three student members (out of six total student members) received a letter from the researcher asking if they would formally participate in the study. These students did not represent exactly the demographics of the larger student body, with the exception of each being college-oriented. The three students represented both genders, two ethnic classifications, were either members of the junior or senior classes, were each enrolled in advanced classes, and were participants in up to one-half dozen extra-curricular activities. They were invited to join the study due to their personal experiences and the researcher’s belief that they would offer a unique perspective on the academic stress problem (the researcher believed that they would offer a rich description of their experience on the committee and would not be negatively influenced by the researcher’s role as principal).

Three teacher members (out of six total teacher members) received a letter from the researcher asking if they would formally participate in the study. The teachers were diverse in age (ranging between 35 and 55), in gender, in years of experience (ranging between 7 and 25 years), and in their disciplinary expertise (in both academic and support disciplines). In addition, one teacher had children who were graduated from a high school similar in demographics to JHS, while the other two teachers did not have children. As
with the student sample, the teachers were invited based on their personal experiences and the researcher’s belief that they offer a valuable and unique perspective on the academic stress problem.

Three parent members (out of four total parent members) received a letter from the researcher asking if they would formally participate in the study; one parent subsequently left the Stress Reduction Committee (and thus the study). One participant was a parent who had children at Jewel-on-the-Hill High School and another had two children at an elementary school in the same district. The parents were asked to participate in the study in order to create a diverse sample of perspectives, a sample that included parents of students at both the high school and younger ages. In addition, the researcher was interested in the vocational diversity of the two parent participants: one was a stay-at-home mother with an advanced college degree; one was a faculty member at an urban high school in the area.
Table 3.1: Study Participant Demographic Information

<table>
<thead>
<tr>
<th>Sub-group Sample</th>
<th>Participant</th>
<th>Demographic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>Zach</td>
<td>White; male; senior class; Student Council and multiple extra-curricula activities; student-athlete</td>
</tr>
<tr>
<td></td>
<td>Camille</td>
<td>White; female; senior class; Student Council and multiple extra-curricula activities; student-athlete</td>
</tr>
<tr>
<td></td>
<td>Aaron</td>
<td>Asian; male; junior class; multiple extra-curricula activities</td>
</tr>
<tr>
<td>Teacher</td>
<td>Tina</td>
<td>White; female; school counselor; less than 10 years of school experience</td>
</tr>
<tr>
<td></td>
<td>Lauren</td>
<td>White; female; SPED teacher; more than 10 years of school experience</td>
</tr>
<tr>
<td></td>
<td>Larry</td>
<td>White; male; history teacher; less than 10 years of school experience</td>
</tr>
<tr>
<td>Parent</td>
<td>Rosa</td>
<td>White; female; no children in high school (two in elementary school); self-employed consultant</td>
</tr>
<tr>
<td></td>
<td>Susan</td>
<td>White; female; two children in high school; urban school counselor</td>
</tr>
</tbody>
</table>

V. Pilot Test

A pilot test of the pre-intervention interview (Instrument #1) was given to two members of Jewel-on-the-Hill’s teaching faculty who were once members of the Stress Reduction Committee (one left the school and the other stepped down due to scheduling conflicts; both continued in consulting roles). Each provided valuable feedback on the design of the interview questions, particularly on its clarity. The researcher took this feedback and made changes to the instrument before its administration.
Additionally, an expert review process was utilized for each of the five instruments. The researcher’s Dissertation Chair, the study’s First Reader (and cluster mentor), a few professors in the Lynch School of Education, and the researcher’s cluster classmates all contributed constructive feedback to the design of the instruments.

VI. Data Gathering Procedures

Five instruments were utilized to collect data in this qualitative case study (data was kept in a secured location, under the control of the researcher):

1. Pre-intervention interview
2. Participant reflective journaling
3. Results of the Stress Reduction Committee
4. Researcher reflective journaling
5. Post-intervention interview

The five instruments used in this qualitative study represent four data collection methods: pre- and post-intervention interviews, participant reflective journaling, products of the Stress Reduction Committee, and researcher reflective journaling. The participants’ interviews and journaling gained insights into their initial understandings of the student stress problem and how their perspectives changed over time (helping to answer the first three research questions). The Committee produced “results” in the form of minutes, documents, and recommendations to the principal, which served to collect data for the first and fourth research questions. Finally, the researcher’s observations as the leader of the committee provided an additional perspective into each of the four research questions.
These data collection instruments provided triangulation to foster the study’s internal validity (Merriam, 1998). In addition, the data allowed for the refinement of the theoretical landscape of the project and study.

Pre-intervention interview (Instrument #1)

Person-to-person interviews can provide a special kind of information for the researcher. Patton (1990, p. 196) explains:

We interview people to find out from them those things we cannot directly observe…. We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about these things. The purpose of interviewing, then, is to allow us to enter into the other person’s perspective.

Ten “semistructured” questions—as defined by Merriam (1998, p. 73) as a “mix of more- and less-structured questions”—were asked to the eight participants in the study as part of the “Pre-Intervention Interview” instrument (see Appendix). The researcher was responsible for each step of data collection. The researcher conducted the interviews—at the beginning of the project—in his private office. Data was recorded on a digital recorder, and then loaded to iTunes. From that software, the researcher transcribed
the data into a printed transcript. This instrument provided data for research questions #1, #2, and #3.

*Participant reflective journaling (Instrument #2)*

Six questions were asked to the nine participants in the study as part of the “Participant Reflective Journaling” instrument (see Appendix). The study participants were responsible for recording the data and the researcher for collecting the data. The participants were encouraged to keep a continuous record of their reflections on the results and processes of the Stress Reduction Committee’s work, as well as their individual learnings as participants in the school initiative. At two equidistant intervals (over the course of 10 months), the researcher requested their observations sent to him via a Word document. This instrument provided data for specific research questions #1, #2, and #3.

*Results of the Stress Reduction Committee (Instrument #3)*

Results were routinely collected by the researcher as part of the Stress Reduction Committee’s work. Data was collected each time the Committee produced a document or implemented an Action Plan (e.g. meeting minutes; parent newsletters; assemblies). The purpose of collecting such results allows the researcher to learn more about the situation, person, or event being investigated (Merriam, 1998). For each product, the document was a primary source. Merriam (1998, p. 122) defines this type of source as “those in which the originator of the document is recounting firsthand experience with the phenomenon of
interest.” The researcher was able to accomplish this because he was the leader of the Committee.

Through the results of the stress initiative, one can see various ways in which student voice came through—the central perspective to the stress problem. Whether through participation in implementing Action Plans, or through the opinions chronicled throughout the results, student voice was pervasive and utilized by the Committee and researcher.

Data was placed in a binder. “Product Form” and “Contact Form” templates were used as a cover sheet for each result, as a method to organize the data as well as describe its usefulness to the researcher. This instrument provided data for research questions #1 and #4.

*Researcher reflective journaling (Instrument #4)*

The journal the researcher kept contained his observations from the field as well as his beliefs and opinions on the variables of the study. Kidder (1981, p. 264) describes observation as a research tool when it “(1) serves a formulated research purpose, (2) is planned deliberately, (3) is recorded systematically, and (4) is subjected to checks and controls on validity and reliability.” The collection of data via the researcher’s observations in the field allowed him to gain a deeper perspective on the context of the study, which influenced subsequent interviews or other data collection instruments (Merriam, 1998). The reflective journal also served the purpose to record the multiple ways student voice was incorporated into the initiative. Throughout the journal, notes
record student participation, student opinions, and observations of how students interacted in the stress initiative.

Merriam (1998, p. 97) presents a list of things to observe, as generated by several qualitative research writers:

1. *The physical setting.* The physical environment, including meeting places.
2. *The participants.* Who is involved and what their roles are.
3. *Activities and interactions.* What is going on?
4. *Conversation.* Who is speaking and what is the content? Who is listening?
6. *Your own behavior.* How am I acting as participant-observer?

Five questions formed the bulk of the data collected as part of the “Researcher Reflective Journaling” instrument (see Appendix): (1) What specific elements or actions relate to the project? (2) What sort of progress is being made on the project? (3) What is being learned about the process of the project? (4) What is being learned about the substance of the project (theoretical landscape)? And (5) What is being learned about [the researcher’s] leadership and mutuality (use examples)?

The researcher’s observations on the process, results, and other components of the project (such as themes, patterns, etc.) were also recorded. The data was collected on an ongoing basis (approximately weekly) and recorded on the researcher’s laptop computer. The researcher printed the Word document and placed the journal into a binder. This instrument provided data for research questions #1, #2, #3, and #4.
Post-intervention interview (Instrument #5)

Several questions were asked to the eight participants in the study as part of the “Post-Intervention Interview” instrument (see Appendix). The researcher was responsible for each step of data collection. The researcher conducted the interviews—fifteen months after the Project had started—in his private office. Data was recorded on a digital recorder, and then loaded to iTunes. From that software, the researcher transcribed the data into a printed transcript. This instrument provided data for each of the four research questions.

VII. Method of Data Analysis

Data analysis requires the researcher to draw judgments from the data. The author of this study analyzed data simultaneously with its collection. Without ongoing analysis, Merriam (1998) warns that data can become unfocused, repetitious, and overwhelming in sheer volume. The judgments made in this study took place via two methods of assessment: formative evaluation and summative evaluation. According to Taras (2005), summative assessment requires the analyst to take the collected data at its final stage and make a judgment against a pre-established standard. Formative assessment is a transitional point during the evaluation process where the researcher examines feedback, which identifies a gap between what is actually happening against the intended standard. It allows the researcher to make adjustments during the study that can potentially lead to an improved product.
The author began the analysis by organizing the data in an efficient and effective way. Miles and Huberman (1994, p.10) define analysis as “consisting of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification.” These tasks can begin at the start of the data collection period and continue throughout the process.

*Data reduction* involves taking the data that appear in transcriptions or field notes and employing a process of simplifying, focusing, and selecting in order to create a collection of material that is usable to the researcher (Miles and Huberman, 1994). Data reduction was a continuous endeavor for this qualitative researcher. The study primarily used three methods for reducing the data: transcription, coding, and linking.

The author conducted individual interviews with the eight participants in the study, once at the start of the project and then again when data collection wound down. The interviews were transcribed into a written format by the researcher. The researcher also used reflective journaling to collect the participants’ perceptions of key issues during the initiative.

Coding was an important strategy used to bring order to the data. The researcher used codes for an assortment of items, including: instruments (I), research questions (RQ), student perspective (SPer), positive (+) or negative (-) outcomes, Action Plans (AP), study tables ($^{ST}E$: Events), and references to the theoretical landscape (Ch2). Coding allowed the researcher to easily retrieve specific pieces of the data, both during the analysis and writing stages (Merriam, 1998).
The researcher coded throughout the data collected via each of the five instruments. He marked up printed interview transcripts, participant journals, his own reflective journal, and actual paper products and artifacts (i.e. the results) with the various coding. This allowed him to collect all data as it related to a particular item (for example, the first research question) and put it together for analysis and synthesis.

To bring some cohesiveness to the breadth of collected data, the researcher linked responses from the participants or from his reflective journaling to the four research questions, when applicable. (If the research questions were effectively formulated, all the data should be linkable to one of the four questions.)

*Data displays* allow the researcher to take an assembly of organized and compressed information and show it graphically or through a matrix (i.e. table) in order to help him draw conclusions (Miles and Huberman, 1994). The author utilized several tables to visually display the data in this study. Each table is described in detail in the “Formats for Reporting the Data” section later in this chapter.

A third course of analysis takes place as the researcher draws *conclusions* and verifies the collected data. Miles and Huberman (1994, p. 11) believe this type of analysis should start from the beginning of the project in order to “decide what things mean—[the qualitative analyst] is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions.” Even though some of these initial conclusions may not produce anything meaningful at the end of the project, the researcher nevertheless begins utilizing this mindset, which is conducive to an inductive style of case study research.
The author of this study constructed *categories* as the chief mechanism to draw conclusions from the data. This process started by sorting individual pieces of data into groupings that shared something in common (Merriam, 1998). The researcher read through the interview transcripts, the reflective journals, and examined the results of the Stress Reduction Committee, among other data, and took notes, made comments, and jotted down thoughts in the margins of the written documents. He took the opportunity to code according to the specific concepts that emerged, which were then categorized. By doing so, the researcher gained the ability to compare concepts within and between categories in order to gain a deeper understanding of any phenomena at play. Dey (1993, p. 58) reminds the qualitative researcher to “create or adapt concepts relevant to the data rather than apply a set of pre-established rules.” Drawing conclusions directly from the data is a challenge to the qualitative case study analyst, but the process also lends itself to fresh and unique interpretations of events.

Merriam (1998, p. 183) suggests several important guidelines to determine the efficacy of categories during data analysis:

- Categories should *reflect the purpose of the research*. (Data should link to the research questions.)
- Categories should be *exhaustive*. (All useful or relevant data should be placed in a category or subcategory.)
- Categories should be *mutually exclusive*. (Individual units of data should not placed in multiple categories, unless there is a reason to show connections between data.)
- Categories should be sensitizing. (Labels should be clear to outside readers.)
- Categories should be conceptually congruent. (The same level of abstraction should characterize all categories at the same level.)

A final and important step during data analysis is the procedure the researcher takes to verify the findings. The author enhanced this study’s internal validity by checking for accuracy throughout the participant interview and journaling data collection. He asked the participants if the conclusions he made on what they said or wrote were correct. In addition, the researcher used the data collected by the instruments to provide triangulation as a further method to foster internal validity. Finally, the author recorded each step he took when organizing and analyzing the data to provide a transparent process to outside readers of the study.

VIII. Formats for Reporting the Data

Several tables were utilized to report the data (listed in order of use in chapter four):

*Role-Ordered Differences and Consistencies Matrix*

The “Role-Ordered Matrix” was a display that ordered information according to study participants’ roles on the Stress Reduction Committee—specifically, the following subsamples: teachers, students, and parents. Each of the first three research questions utilized this type of display in order to represent the various opinions each participant had on the questions asked in Instruments #1, 2, and 5 (interviews and journaling); quotations were cited according to instrument. An additional column in the display recorded whether
a participant’s perspective changed over the course of the study. From the table’s data, one could see where there were converging or divergent viewpoints within the subsample. In addition, consistent or different opinions could be deduced within the overall sample.

Organizing data in this manner allowed the researcher to scan the columns to see what was happening and see how perspectives differed according to role, as well as within the role (Miles and Huberman, 1994.) This approach was particularly useful in this study due to the uniqueness of the subsamples in both demographic characteristics and experiences.

Participant-Observer’s Perspective

The participant-observer used his reflective journal (Instrument #4) to record his observations and perspective on each of the first three research questions—i.e. how he and the Committee named the stress problem, the challenges he and the Committee encountered, and the new learnings he and the Committee generated. These displays listed a collection of these thoughts (a table for each research question). The displays included a column indicating whether the researcher’s perspective or observations changed over time.

Theme-Ordered Conceptual Matrix

This thematic conceptual matrix represented themes, as culled by the participant-observer—each of the three research questions had a table to organize the data. All five
data collection instruments provided data for these matrices. An additional column provided a comment from the participant-observer, representing his observations or perspective on the theme. In this type of matrix, the researcher is able to draw inferences directly from the displayed data to identify general and overarching themes or patterns that underlie the specific data (Miles and Huberman, 1994).

*Case Dynamics Matrix*

The “Case Dynamics Matrix” was a descriptive display unique to the perspective of the study’s participant-observer. It answered the question, “What were the leadership challenges encountered, as seen by the participant-observer?” The researcher’s reflective journal (Instrument #4) was the source of this data. Three columns were used to organize the researcher’s observations: “Strains/difficulties”, “Underlying issue or cause”, “How coped with or resolved”. The data were sorted into three categories, each of which received a table: Committee Processes; The Leader; and Communication.

A case dynamics matrix allows the analyst, during and after data collection, to link data with explanations on why specific things happen as they do. In addition, it traces the forces employed during change and links it to outcomes of specific actions (Miles and Huberman, 1994). In this case study, the participant-observer’s explanations were of particular interest. He drew conclusions by moving across each row and noting patterns or themes.
Results Summarizer

This matrix displayed the specific results of the Stress Reduction Committee as collected via the third instrument. This table aided the researcher in organizing the data to answer the fourth research question—the results of the school’s initiative to address the student stress problem. Five columns were employed in a single table: “Result”, “Developer(s)”, “User(s)”, “Importance”, and “Salient Characteristics”. These columns allowed the researcher to scan the data to see any patterns or special relationships between variables: the results, who developed them, who used them, and the importance they gave the project. The final column provided the reader a brief explanation of these variables for each result. The researcher grouped some results into like categories to aid the data analysis (Organizing Documents, Action Plans, etc.).

Event Listing

This table was a descriptive display ordering data by periodic time intervals (most common, monthly). It preserved the chronological flow of events and allowed for an analysis of what led to what, and when—i.e. the connection between events (Miles and Huberman, 1994). Events were sorted into several categories. This type of matrix also allows the qualitative researcher to present the processes occurring during the period of the data collection (Miles and Huberman, 1994). The third and fourth data collection instruments were the source of data for the Event Listing table.
Scatterplot of Involvement Over Time

Scatterplots can be useful to the researcher when they display similar variables over separate time periods (Miles and Huberman, 1994). This table recorded the level of involvement—high, moderate, low—of distinct participant groups in the school’s initiative; it helped produce additional findings outside of the four research questions.

Data was organized in columns at five time periods via the fourth instrument: “Pre-Planning (prior to March 07)”, “Early Planning (March – June 07)”, “Summer 07”, “Mid- Planning (Sept. 07 – Dec. 07), and “Mid-Post Planning (Jan. 08 – June 08)”. The participant groups fell into two general categories—committee members and others—and a few subcategories (teachers, students, administrators, parents). All were coded accordingly.

Opportunities for Involvement Matrix

The Stress Reduction Committee’s initiative offered many opportunities for students, parents, and teachers to get involved. Each of the groups had a descriptive display that rated the size and degree of its involvement—large/high, moderate, low—according to specific actions the Committee took (coded via the Action Plans that were developed). In addition, the participant-observer recorded his perspective on the group’s involvement in each opportunity. His reflective journal (Instrument #4) served as the source of data.
Level of Committee Assistance Matrix

This descriptive display continued to chart the involvement issue central to the study with data collected via the fourth instrument. It recorded the level of assistance that specific groups of participants provided to the leader of the Stress Reduction Committee, and did so for each of the Committee’s Action Plans, as well as for other specified results. The participant-observer rated the level of assistance by both the Committee and by himself to the results as “high”, “moderate”, or “low”. A final column provided a comment (relative to the assistance issue) by the participant-observer on each of the results listed in the table.

IX. Frameworks for Discussing the Findings

The critical piece of any research study is the findings. The researcher attempts to illuminate the gathered and analyzed data to answer the specific research questions of the study. To do this in a cogent way, the writer must discuss findings within a framework. Typically, the researcher will return to the theoretical landscape of the study and test whether the assumptions in the rationale came to fruition.

The researcher may also be interested in testing his findings against any pre-existing theory or earlier studies outlined in the literature review. In doing so, he can confirm or challenge findings from other researchers. Because this study of an academic stress problem in the high school setting had little case study literature to build upon, the author expected to suggest new areas for scholarly research.
This study presented the findings in a descriptive fashion. Merriam (1998) describes this presentation as organizing data and linking it together in a narrative that conveys the meaning the researcher has derived from studying the context of the case. In writing the narrative, the author employed three tasks, as suggested by Merriam (1998): determining the audience, selecting a focus, and outlining the report.

Before presenting the findings of the study within a framework, the author determined whom the case study was intended (i.e. the audience). In doing so, the writer can structure the content of the report in a targeted manner and determine the style of presentation (Merriam, 1998). The author of this case study targeted fellow practitioners in the field of secondary education (public and private). However, the case study also provided useful information to parent and student readers of the report through the literature review section in chapter 2 and the lessons for leadership section in chapter five.

Merriam (1998) suggests the researcher, after determining the audience, select a focus for the narrative. This case study was not intended for educational theorists or a dissertation committee, and thus did not focus heavily on theory or methodology. Instead, the case centered on what was useful to teachers and administrators in a secondary school setting.

A final piece of organizing the report is to develop an outline to present the findings in a clear and flowing manner. The author wants to ensure the narrative is not a rambling description of the researcher’s account of the study. He should also be mindful, considering the audience, of the length of the report (Merriam, 1998).
X. Limitations of the Study

The researcher should be mindful of the limitations and biases inherent in his study. When discussing these issues, the concepts of reliability and validity must be addressed. These two concepts get to the quality of the research study and whether its results can be believable, are accurate, and can be reasonably applied to similar settings (Miles and Huberman, 1994).

Reliability—sometimes referred to as dependability or auditability—gets at whether the research processes used were consistent and stable over the time period of the study. Several strategies can be used to increase the reliability of a study (Miles and Huberman, 1994, p. 278):

- Aligning the research questions with the design of the study.
- Checking the quality of collected data for bias.
- Collecting data across the full time period of the study as well as from each of the study’s participants.
- Clearly describing the researcher’s role and status within the study.

Two distinct types of validity are relevant in a qualitative study: internal validity and external validity. Internal validity measures how truthful the findings of the study were to its participants and its readers (Miles and Huberman, 1994). Maxwell (1992) differentiates the types of understanding that qualitative studies can produce: descriptive (what happened in specific situations); interpretive (what is meant to the people
involved); and evaluative (judgments on the meanings). Each of these types were
germene to this case study.

Miles and Huberman (1994, p. 279) suggest several strategies to control internal
validity:

- Writing descriptions that are context-rich and meaningful.
- Writing about the account in a comprehensive way.
- Using triangulation of the data sources to create converging conclusions.
- Identifying areas of uncertainty.
- Allowing the participants of the study to verify the data collected from them.

External validity speaks to whether readers can transfer any of the study’s
conclusions or findings to other contexts (Miles and Huberman, 1994). Firestone (1993)
identifies three levels of external validity (sometimes referred to as generalization): from
sample to population, analytic, and case-to-case transfer. Given that this study was
bounded to a particular type of high school (college prep) and distinct age and
socioeconomic characteristics, only a case-to-case transfer seemed feasible in this
dissertation.

Miles and Huberman (1994, p. 279) offer several factors that can influence a
study’s external validity:

- Whether the characteristics of the original sample of persons, settings,
  processes (etc.) are fully described enough to permit adequate comparisons
  with other samples.
- The degree in which limitations and biases inherent in the study have been effectively controlled and addressed.

- The degree to which the researcher defines the scope and boundaries of the generalizability of the study.

- Whether a range of readers report the findings to be consistent with their own experiences.

- Whether the findings are described via “thick descriptions” yet still remain clear and readable to others, and not too lengthy (Merriam, 1998).

Biases are inherent and can be numerous in qualitative and quantitative research studies. The impact of these must be carefully considered by the researcher so as not to burden the study with limitations that significantly hurt its reliability and validity (although external validity is severely hampered by the very nature of qualitative research). This researcher pointed to the biases most relevant to the qualitative study of addressing student stress.

*Researcher bias* had perhaps the greatest influence on this study because of the researcher’s role as both participant-observer, leader of the Stress Reduction Committee, and principal of the school. He was responsible for collecting data from interviews and journals, as well as using his own reflective journaling as a significant data source. All of this data was filtered through the lens of his prior experiences and his desire to lead a successful school initiative. Merriam (1998, p. 22) writes “because the primary instrument in qualitative research is human, all observations and analyses are filtered through that human being’s worldview, values, and perspective.”
To control for the potential threat to internal validity via researcher bias, the participant-observer used triangulation of data sources as his chief data analysis methodology. In addition, the researcher was continuously mindful of the way he interpreted the data he collected. Furthermore, he checked these interpretations with the participants who verified them for accuracy.

*Single site* and *unique site* biases can affect the researcher’s ability to generalize the results of the study to other contexts (external validity). Pointing again to the distinct characteristics of this study’s setting, outside readers must use caution when trying to apply its findings to broader contexts or demographics. Also, this study did not address all the types of stressors affecting students. Readers of case studies sometime believe the accounts represent the whole of the situation or context (Merriam, 1998). In this study, the researcher described the high school culture as it related to academic stress without getting too far into the significant impact of student-to-student social pressures, economic stress, or ableism.

The researcher recruited participants in order to gather the greatest diversity of perspectives and opinions as possible. The sample size (eight persons) in this study was relatively small, even for qualitative studies. As a result, a *sample size* bias could threaten the study’s external validity, in that it may not produce the breadth and depth of data the researcher hoped for. In carefully and purposively selecting participants who have diverse characteristics and backgrounds, a researcher can limit this bias without expanding the size of the sample to unmanageable proportions (Consalvo, 2007).
Qualitative studies produce *instrumentation bias* because the researcher makes changes to the data collection instruments as the study unfolds. This is natural and desirable. The researcher sometimes needs to push the participant to elaborate in their journal or interview responses to gain richer and more useful data. In addition, the qualitative researcher needs the flexibility to ask follow-up questions to achieve the aforementioned objective. These approaches are considered acceptable to the qualitative researcher and should have little impact on the quality of the study’s findings (Consalvo, 2007).

A further limitation to this study could be found through a *time bias*. Progress in school initiatives typically unfolds in a nonlinear and clunky fashion. This study was bound not only in the characteristics of its sample, but also in the time period utilized to collect data. While these factors were limiting, a period of fifteen months was used to collect data (starting with reflective journaling of the participant-observer), which should have had a minor effect of the study’s validity (Consalvo, 2007).

The researcher’s ethics, integrity, and sensitivity to the data can lend itself an additional limitation to the case study evaluation. Guba and Lincoln (1981) point out that an unethical researcher could pick and choose from the data in order to produce a case study that fits his own wishes, overriding the qualitative design characteristic that values participants’ perspectives over that of the researcher. The author of this study checked the conclusions he made from the raw data with objective colleagues not connected to the study.
Chapter four of this study reports the findings from analyses and syntheses of collected data. The researcher scrutinized the data as he attempted to find patterns of congruence. He looked to triangulate the sources of data from the interviews, journaling, and SRC products in order to confirm the findings.
Chapter Four

Findings

I. Introduction

Chapter four presents the findings of the study, while the subsequent and final chapter provides the reader with the researcher’s discussion of the findings. Findings are organized through the study’s four research questions:

(1) How did the Stress Reduction Committee analyze and name the student stress problem?

(2) What were the challenges encountered by the faculty, parent, and student members of the committee during its work on the student stress problem?

(3) What were the new learnings of the committee during its work on the student stress problem?

(4) What were the school-wide results of the planning phase of the Project?

The findings come from the researcher’s analysis of data he collected over the period of the study. The study involved exploring aspects the leadership project, of which the researcher was both a participant-observer and the leader. The findings represent the researcher’s response to the research questions, based on the data generated within the study.

Each research question will receive its own heading. Each section begins with the most critical findings for that particular research question. A series of tables will present summaries of data collected from participant interviews and journaling, from results, and
from the researcher’s reflective journal. Findings derived from participant interviews and journaling represent the author’s interpretations of the opinions and attitudes as generated from the uniform questioning. These tables allow the reader to access the evidence supporting the findings.

The chapter ends with a section presenting the findings that did not relate to a specific research question, but that the researcher nevertheless deemed worth mentioning.

II. Description of Site and Participants in Project

“Examining and addressing academic stress at a suburban high school” was an ethnographic descriptive, single site case study (Merriam, 1998), focusing on the culture of the high achieving Jewel-on-the-Hill High School (JHS), as well as the school community’s beliefs, values, and attitudes that shaped the behaviors exhibited in this culture.

The high school educates 1400 students across four grade levels; it employs approximately two hundred people, filling the roles of teachers, administrators, counselors, and support personnel. 89 percent of the student body is ethnically classified as White according to the state’s Department of Education criteria. African-Americans, Latinos, and Asians represent a minority population in equal proportions at the school. JHS is a college preparatory school and is proud of its 93 percent four-year college acceptance rate for the Class of 2007.

The school resides in an affluent commuting suburb several miles outside of a major metropolitan area in New England; it has a population of just under 20,000. The
community places a high value on formal education and holds its one high school, one middle school, and five elementary schools to high expectations for the achievement of each of its 5000 students.

The high school consistently achieves among the highest scores on the state tests—over 90 percent of its students received “advanced” or “proficient” ratings on the 2007 math and English exams, more than 20 percentage points higher than the state average. Scholastic Aptitude Test (SAT) results are on par with other high-achieving schools. Each year, Jewel-on-the-Hill’s students are very competitive with their peers nationally for acceptance to highly selective colleges and universities.

The Stress Reduction Committee was formed in spring, 2007 and given the charge of examining and addressing the academic stress problem at the high school. Student, staff, and parent members of the community volunteered to participate on the committee when the principal solicited interest. (All individuals interested in joining the committee were accepted as members.) The Committee worked in a collaborative way toward meeting several goals, all of which aimed to address the stress culture at school or at home. This work was referred to as the “leadership project” by the researcher.

The subjects of the study were eight of the sixteen members of the Stress Reduction Committee. Participants were invited to join the study via a private meeting with the researcher and chosen in order to create a group with a diversity of perspectives and experiences, as well as to enhance the researcher’s ability to better understand the issues under study (Gay, Mills, & Airasian, 2006). This approach in choosing a small sample made it “purposive” and “nonrandom” (Merriam, 1998). All participants invited
to participate in the study accepted the request. During the course of the study and project, new members joined the Committee and others left voluntarily—one of these individuals was a study participant (a parent, who reduced the study’s sample from nine to eight participants).

The sample consisted of three sub-samples: three student members, three teacher members, and two parent members. The individuals were considered typical members of the Stress Reduction Committee. The student members do not represent exactly the demographics of the larger student body, with the exception of each being college-oriented. The three students represented both genders, two ethnic classifications, were either members of the junior or senior classes, were each enrolled in a mix of advanced and honors classes, and were participants in up to one-half dozen extra-curricular activities.

The teachers were diverse in age (ranging between 35 and 55), in gender, in years of experience (ranging between 7 and 25 years), and in their disciplinary expertise (in both academic and support disciplines). In addition, one teacher had children of her own who have graduated from a high school similar in demographics to JHS while the other two teachers did not have children. As with the student sample, the teachers were invited based on their personal experiences and the researcher’s belief that they offered a valuable and unique perspective on the academic stress problem.

One parent participant was a mother who had children at Jewel-on-the-Hill High School and the other parent had two children at an elementary school in the same district. The parents were asked to participate in the study in order to create a diverse sample of
perspectives, a sample that included parents of students at both the high school and
younger ages. In addition, the researcher was interested in the vocational diversity of the
two parent participants: one was a stay-at-home mother with an advanced college degree;
the other was a faculty member at an urban high school in the area.

Table 4.1: Study Participant Demographic Information

<table>
<thead>
<tr>
<th>Sub-group Sample</th>
<th>Participant</th>
<th>Demographic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>Zach</td>
<td>White; male; senior class; Student Council and multiple extra-curricula activities; student-athlete</td>
</tr>
<tr>
<td></td>
<td>Camille</td>
<td>White; female; senior class; Student Council and multiple extra-curricula activities; student-athlete</td>
</tr>
<tr>
<td></td>
<td>Aaron</td>
<td>Asian; male; junior class; multiple extra-curricula activities</td>
</tr>
<tr>
<td>Teacher</td>
<td>Tina</td>
<td>White; female; school counselor; less than 10 years of school experience</td>
</tr>
<tr>
<td></td>
<td>Lauren</td>
<td>White; female; SPED teacher; more than 10 years of school experience</td>
</tr>
<tr>
<td></td>
<td>Larry</td>
<td>White; male; history teacher; less than 10 years of school experience</td>
</tr>
<tr>
<td>Parent</td>
<td>Rosa</td>
<td>White; female; no children in high school (two in elementary school); self-employed consultant</td>
</tr>
<tr>
<td></td>
<td>Susan</td>
<td>White; female; two children in high school; urban school counselor</td>
</tr>
</tbody>
</table>

III. Findings Under the First Research Question

The researcher collected data on how the Stress Reduction Committee analyzed
and named the student stress problem. The perspectives of each participant in the study,
as well as the views from the participant-observer, were considered in generating five distinct findings.

First finding

There existed consistencies as well as differences in perspectives within each subsample; the views of individual participants shared some common elements but participants also offered unique opinions on how they analyzed and named the student stress problem. These are presented in Table 4.2.

Examples of consistencies within subsamples included the teachers identifying the expectations of the high school culture as a stressor. Another example was found within the students, who were clear about their role on the Committee.

Examples of intra-subsample differences could be found within the parent and student groups. One parent spoke to the expectations being too high in the stress culture, particularly with athletics, while the other focused on her belief that the “average” teenager struggles to recognize and control their stress. The students shared a belief on the importance of a locus of control over stress, however, one student blamed parents while the other students were more vague on the source.

There also existed consistencies as well as differences within the overall sample when data from subsamples were compared. All three stakeholders—teachers, students, parents—were cognizant of their roles on the committee (to represent their constituencies). They also all spoke to the issue of locus of control as being central to effectively managing stress.
A noticeable difference within the overall sample, through the sameness of the subsamples, was found on the issue of school culture. Parents and teachers were more illustrative about the stress culture and its influence on students, while students made little mention of the culture. This is perhaps because parents and teachers are less immersed in the stress culture than students, who also have little capacity to compare their high school culture to others.

This finding illustrates that one can make some generalizations about the perspective of each stakeholder, but should do so with caution. The researcher found the individual viewpoints a richer source of data than the subsample or sample as a whole.

Second finding

For some participants, time, buttressed with exposure to literature and discussions, proved an important influence to change their perspectives on how to analyze and name the student stress problem. Data collection took place over a fifteen-month period. This finding is also represented in Table 4.2. The time component was measured and analyzed in one of three ways: (1) direct questions about time’s influence on participants’ thinking (Instruments 1, 2, and 5), (2) transcript analyses from Instruments 1, 2, and 5: comparing data across instruments (since data collection took place over the entire study period), and (3) the participant-observer’s observations via his reflective journaling (Instrument 4).

The most significant influence that time appeared to have was to broaden the study participants’ naming of the stress problem. This could not have taken place without
the exposure to literature provided by the Committee leader as well as the frequent
discussions that took place within the group. A general trend was for participants to start
with a relatively narrow definition (e.g. stress caused by the school) and then see their
perspectives enlarge to include other factors such as parental and college influences, or
the student’s responsibility over their own stress. Other participants, over time, came to
see seemingly unconnected mental health and physical symptoms as relating to stress.
Some participants also came to see the stress problem as more complex than they
originally characterized it. Time (and the supports) appeared to allow for this change.
Table 4.2: Role-Ordered Differences and Consistencies Matrix  
(Data sources are coded according to Instrument)

**Key**  
I1 = Instrument 1 (Initial interview); I2 = Instrument 2 (Participant journaling)  
I5 = Instrument 5 (Post-intervention interview)

<table>
<thead>
<tr>
<th>Subsample</th>
<th>Person</th>
<th>Participants’ Quotations on Naming the Stress Problem</th>
<th>Did change occur over time?</th>
<th>Consistencies within Subsample</th>
</tr>
</thead>
</table>
| Teachers  | Tina   | · Students trying to do everything and be perfect (I1)  
· Well-intentioned parents are part of the problem; give their children less opportunity to learn from setbacks (I1)  
· Society exposes kids to various complex issues at an early age (I1)  
· The culture is a problem for some students (I5)  
· Low socio-economic status is a stressor for some students (I5)  
· Her understanding of the problem has not changed, but broadened over time (I2)  
· Time complicated the issue for her | No to little change, except students need to own a big piece of the remedy (I2) | · Expectations of the culture  
· Parent’s role in the stress problem |
|          | Lauren | · Stress is a huge problem and is taking a toll on students (I1)  
· Stress cuts across all academic levels and (I1)  
· Stress also affects all teachers, who are under a lot of pressures; this needs to be addressed (I2)  
· Expectations to be perfect, to get into college, etc. are a big stressor; kids get lots of different messages (I1) (I2)  
· Parents are sometimes too involved or eager to fix things on behalf of their kids—thus not letting them learn how to handle situations on their own; also, expectations (I1) (I2)  
· Some students and parents rationalize the stress problem (I2)  
· There is more awareness of the stress problem, particularly from parents (I5)  
· College is a stressor (I5) | Consistent views (I5) | |
|          | Larry  | · Sees role to represent teachers (I1)  
· Many students seem unable to handle setbacks (e.g. a bad grade) (I1)  
· Parents own a big piece of problem (too involved); teachers own some of it (I1)  
· Students lack the maturity or experience to handle a heavy workload (I2)  
· Teachers own part of the problem and the solution (I5)  
· There is pressure on teachers from some administrators to be as rigorous and demanding as possible (I5) | Consistent views (I5) | |
<table>
<thead>
<tr>
<th>Subsample</th>
<th>Person</th>
<th>Participants’ Quotations on Naming the Stress Problem</th>
<th>Did change occur over time?</th>
<th>Consistencies within Subsample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Zach</td>
<td>· Sees role to represent students (I1) &lt;br&gt; · Stress cannot be eliminated, but it can be better managed. (I1) (I5) &lt;br&gt; · Main issue is students feeling a lack of control over stress (I1); some components can be controlled and others cannot (I5) &lt;br&gt; · I tend to blame others for the stress problem; students need to recognize their central role in their own stress (I1) (I2) &lt;br&gt; · Peer pressure is a big factor (I2)</td>
<td>His definition of the stress problem has broadened (beyond just academic) (I2) (I5)</td>
<td>· Students are clear about their role on the committee &lt;br&gt; · Lack of control is a critical component to defining the problem &lt;br&gt; · There was change over time (broadening their definition of the problem) &lt;br&gt; · Recognized the student’s role in the stress problem</td>
</tr>
<tr>
<td></td>
<td>Camille</td>
<td>· Sees role to represent students (I1) &lt;br&gt; · There is a lot of competition and negative energy between students, especially over college (I1) (I5) &lt;br&gt; · Everyone feels some stress because of the culture, but it’s individualized (I1) &lt;br&gt; · Many students are overwhelmed and feel no control over their lives (I1) &lt;br&gt; · There is good stress and bad stress (I5)</td>
<td>Did not realize some would oppose this stress initiative (I2) &lt;br&gt; · Did not realize the extent stress caused physical problems (I2) &lt;br&gt; · His definition of the stress problem has broadened (e.g. good stress vs bad stress) (I2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aaron</td>
<td>· Sees role to represent students (I1) &lt;br&gt; · Each person handles stress differently, so we should keep the definition of it in broad terms, to define it as a series of behaviors so to avoid cultural misunderstandings (I1) &lt;br&gt; · Believes teachers are mostly appropriate, but they could do things to help the problem (I1) &lt;br&gt; · He is getting better at recognizing the sources of stress (I5)</td>
<td>His definition of the stress problem has broadened (other causes) (I2) and become more abstract (I5)</td>
<td></td>
</tr>
<tr>
<td>Subsample</td>
<td>Person</td>
<td>Participants’ Quotations on Naming the Stress Problem</td>
<td>Did change occur over time?</td>
<td>Consistencies within Subsample</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| Parents   | Rosa   | · Sees role to represent parents (I1)  
           · Expectations are really high (too high sometimes) (I1)  
           · Managing stress is key to the solution (I1)  
           · Athletics is a big stressor for her children (I5)  
           · Naming the stress problem is difficult for her, because she sees it as so complex (I5) | · Over time, she has realized how complex the stress problem truly is (I2)  
           · She has been able to better relate the stress problem to her own life and her kids (I2) | · Parents are clear about their role on the committee  
           · Controlling and managing stress are critical components to defining the problem  
           · There was change over time (broadening their definition of the problem) |
| Parents   | Susan  | · Sees role to represent parents of younger students (I1)  
           · Sees this as people acting on values and what they feel is most important (I1)  
           · Feels average teenager is not able to control their stress or even recognize much of it (I1)  
           · She sees the physical manifestations of the pressures that students feel (I5)  
           · The stress problem is multidimensional (I5) | · Over time, she has defined the stress problem more broadly than at first (I2)  
           · She sees more of a role of the family around their child’s stress (I2)  
           · Sees stress as needed to be addressed in a coordinated and systematic manner (I2)  
           · She has seen the individual component of the stress problem more clearly over time (I5) |
**Third Finding**

The participant-observer was able to fulfill a dual role in both actively participating in the analysis and naming of the stress problem as well as being able to step back to observe how the Committee-as-a-whole was defining the stress problem. These observations are represented in Table 4.3.

To see an example of his active participation, the reader can comb through the minutes of Committee meetings. In doing so, there would be examples of the participant-observer leading the group—one such case being a revisioning task to rewrite the project’s purpose and to formulate beliefs about stress and generate messages to communicate to stakeholders.

In observing the whole group, the participant-observer made note of the various ways Committee members (including those not participating in the study) named the stress problem (e.g. workload, sleep, effective teaching, etc.). He also noted the myriad of suggestions members made on how to help remedy the stress problem, such as facilitating “student voice” opportunities in the school.

The significance of this finding was that the participant-observer was able to exert influence over the stress initiative as its leader while at the same time reflecting on how participants were making sense of the initiative. This concept will be further addressed in chapter five.
Fourth Finding

Some aspects of the participant-observer’s perspective were influenced by time, and by exposure to literature and discussions of the Committee. These observations are also represented in Table 4.3.

As experienced by the participants in the study, the researcher’s perspective on analyzing and naming the student stress problem also broadened over time to include many factors (in particular, the role of communication in the student stress initiative). Other components of the stress issue became more evident over time, such as the importance of quality interpersonal relationships to combat stress. Time could not have exerted its influence without the researcher’s exposure to literature relevant to leadership or stress work, as well as his participation in the discussions of the Committee.

While some observations changed or became clearer over time, other beliefs remained consistent throughout the data collection period. The identification of three distinct stakeholders in the stress problem (students, teachers, parents) as well as beliefs about what constitutes rigor remained constant over time. The activity of the Stress Reduction Committee confirmed the validity of these observations, and others like it, in the mind of the participant-observer.
Table 4.3: Participant-Observer’s Perspective
(Data source: Instrument #4—Reflective Journaling)

<table>
<thead>
<tr>
<th>Participant-Observer’s Observations and Perspective on Naming the Stress Problem</th>
<th>Did it change over time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework, sleep, resiliency, parents, culture, cheating, workload, effective teaching, and grades were the most frequently talked about issues in the committee.</td>
<td>Discussion moved from specific issues to that of communication</td>
</tr>
<tr>
<td>The “vision” of the stress initiative: (a) to better engage students in school and better prepare them to learn; (b) to develop healthier and happier adolescents; (c) to broaden students’ definition of “success”, for it to be more holistic; (d) to build capacity for all stakeholders to better manage their stress in today’s culture; (e) to establish a culture and value in the school community to educate the “whole child”</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Quality relationships as a central tenet to better managing stress</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The school stress culture bombards students with messages about what is important; we need to be mindful of its effect</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Social and emotional competencies are a central aspect of this work</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The “identity” that students choose influences their amount of stress (e.g. an “over achiever”)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Culture is a series of behaviors, so changing the stress culture will change behaviors associated with stress</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The stress initiative is not something you “do”, but rather something that promotes empathy and mindfulness among the school community, something to incorporate into school improvement.</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Students must feel some control and choice over their decisions, and in how they define “success”</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>There are multiple stakeholders in the stress problem (who must take responsibility for their role): school, students, parents, community, colleges, etc.</td>
<td>Consistent</td>
</tr>
<tr>
<td>“Rigor” is about appropriately challenging students through high expectations instead of a fast pace and large quantity of work</td>
<td>Consistent</td>
</tr>
<tr>
<td>Stressors can be academic but also social in nature</td>
<td>Consistent</td>
</tr>
<tr>
<td>There are practical strategies stakeholders can use to reduce their stress (e.g. breathing exercises)</td>
<td>Consistent</td>
</tr>
<tr>
<td>The distribution of workload across the academic year is a factor in the stress problem</td>
<td>Consistent</td>
</tr>
<tr>
<td>The stress problem through a learning lens is about whether stress inhibits students’ ability and readiness to learn</td>
<td>Consistent</td>
</tr>
<tr>
<td>Participant-Observer’s Observations and Perspective</td>
<td>Did it change over time?</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>The school can be hypocritical in the stress problem (when it professes a mastery approach to learning yet relies on a tracking system and numerical grading structures)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Negativity can be viewed as a stressor (for both individuals and the committee)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Mental and physical health is central when addressing the stress problem</td>
<td>Consistent</td>
</tr>
<tr>
<td>Society seems to have a complex relationship with the issue of sleep; it frequently complains about too little sleep but also views “excessive” sleep as “lazy”</td>
<td>Consistent</td>
</tr>
<tr>
<td>A lack of downtime in the school day can be a stressor for some stakeholders</td>
<td>Consistent</td>
</tr>
<tr>
<td>Promoting “student voice” to better understand the student perspective is a value and goal of the initiative</td>
<td>Consistent</td>
</tr>
<tr>
<td>An unanswered question: Do large, high-achieving public schools have more stress and less school spirit than less academically-focused or private schools?</td>
<td>Surfacd later in the initiative</td>
</tr>
</tbody>
</table>
Fifth Finding

Several themes could be identified as the Committee named and analyzed the student stress problem. These themes are represented in Table 4.4. From the multitude of observations, interviews, journaling, and other activities, data tended to fall into five distinct categories: (1) roles and responsibilities, (2) locus of control, (3) school culture, (4) social and emotional competencies, and (5) focus on health, learning, and success. The researcher, as a result, was able to identify the most critical topics in the analysis of and naming of the student stress problem.

Table 4.4: Theme-Ordered Conceptual Matrix
(Data source: All instruments)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Participant-Observer’s Observations and Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles and responsibilities</td>
<td>Stakeholders were able to delineate between their unique role in the stress problem and its solution as well as the roles of other, multiple, stakeholders.</td>
</tr>
<tr>
<td>Locus of control</td>
<td>The ability to control one’s decisions that influence one’s stress as well as manage one’s stress became a central issue to the initiative.</td>
</tr>
<tr>
<td>School culture</td>
<td>Many conversations by the school community and SRC led back to the concept of school culture and its influence on stress. A “stress culture” was also identified.</td>
</tr>
<tr>
<td>Social and emotional competencies</td>
<td>Social and emotional competencies were identified as a key factor in resiliency (i.e. the ability to bounce back from a stressful experience)</td>
</tr>
<tr>
<td>Focus on health, learning, and success</td>
<td>The commonly suggested response to the student stress problem in broad and simple terms, became “promoting mental and physical health, and facilitating mastery learning and growth”. Near the end of the data collection period, the SRC added, “How do you define success?” as a central question to the school community.</td>
</tr>
</tbody>
</table>
The first research question produced five findings from data organized via three tables. A similar approach will be taken to present findings for the second research question.

IV. Findings Under the Second Research Question

The second research question surfaced data on the challenges encountered by the faculty, parent, and student members of the Committee during its work on the student stress problem. The views of each participant in the study, as well as the perspective of the participant-observer, were considered in generating six findings. The first three findings were distinct from the first research question. The second set of findings, however, were consistent with the interpretation of the first research question.

*First finding*

*The challenges identified by the participant-observer could be sorted into general categories.* Challenges tended to fall into “types”. Three distinct categories were identified in the data:

1. *Committee processes*. Because the Stress Reduction Committee (SRC) was newly formed to take on a complex problem, significant time was spent on how the group could best function efficiently and effectively (e.g. how often to meet; how to conduct the meetings, etc.). The SRC produced an impressive array of data, ideas, and products, all of which needed to be organized in a coherent and helpful way. Additionally, the Committee needed to create
mechanisms for charting its progress and generate the type of data needed to make corrections on its course.

(2) The Leader. The leader of the Stress Reduction Committee was also the principal of the school. This fact in itself opens up the possibility for leadership bias, or unnatural influence over the initiative, or having participants give deference to the position. The leader was also challenged to deal with resistance that was focused on him personally or on his role. This situation required “thick skin” and other coping strategies, and the spotlight demanded the leader to model acceptable behavior (both as the leader of the school and the leader of the initiative). Additional data pointed to the strains of leading a major school improvement initiative while also leading and managing other aspects of a large high school.

(3) Communication. Change efforts hinge on effective communication. The data in this study illuminated this concept. Many people in the school community incorrectly associated an initiative’s aim to be to decrease academic rigor or challenge (thus representing a threat to the reputation of the school). As a result, it became especially important to make communication strategic and also to connect the initiative with other school or district improvement efforts that were closely aligned to the stress work (e.g. the district’s social and emotional learning initiative).
The significance of the finding lies in the ability to categorize challenges faced during the Committee’s work. In doing so, it becomes easier for the group to identify the problem and thus target a response.

Second finding

The strains or difficulties encountered by the Stress Reduction Committee could be traced to an underlying issue or cause, as determined by the participant-observer. Through careful examination by the Committee members and the participant-observer, the origin of the specific challenges could be identified. For example, the considerable time spent by the Committee on how best to function stemmed from the complex nature of taking on a comprehensive school improvement initiative via a diverse (and newly formed) group of participants (with a range of experience and personalities). The enormity of data collected on several different stress topics and the potential controversy of addressing cultural issues presented unique challenges for the group.

The personal makeup (helpful traits and not-so-helpful traits) and style preferences of the leader caused specific challenges to the Committee. For example, his comfort level in having difficult or confrontational conversations (as Committee leader) was often determined after first taking a dipstick of the climate of the school (to determine how much conflict could be tolerated).

An unanticipated challenge that faced the initiative came from the large amount of local and national media requests to cover the Committee’s work. The stress problem was
in vogue nationally and the school’s efforts to address it drew countless requests from print, radio, and television media.

Several of the challenges faced by the Committee have been experienced many times over in previous school change initiatives in other communities. Chapter five will mention the body of relevant literature that illustrate the challenges associated with school change.

Third finding

The strains or difficulties encountered by the Stress Reduction Committee could be coped with or resolved. The Stress Reduction Committee accepted and responded to many of the challenges it faced. It created several graphic organizers and tables to organize its outputs. To help the SRC broaden its understanding of the stress problem, it brought in consultants to help advise the group or provide professional development to faculty, students, and others. The participant-observer’s weekly journaling not only helped generate data for the study, but it helped him reflect on the challenges he faced as the leader of the initiative (as did a body of professional literature). To aid communication with a school community of thousands of people, a detailed Communication Plan was created to help the Committee reach its constituents.

When the Committee could put strains and difficulties into categories, and then trace them to an underlying issue or cause, it was able to come together and devise strategies and actions to cope with or overcome the challenges. This connection and
response form the significance of the first three findings, the data of which are presented in Table 4.5:
Table 4.5: Case Dynamics Matrix
(Data source: Instrument #4 – Reflective Journaling)

**Category**
Committee Processes

<table>
<thead>
<tr>
<th>Strains/Difficulties</th>
<th>Underlying Issue or Cause</th>
<th>How Coped With or Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead an efficient committee process (e.g. meetings, action plan implementation, number of meetings, pace of Initiative, etc.) to ensure Initiative is making progress as well as SRC members learning more about the stress problem</td>
<td>The complexity and challenge of managing a comprehensive reform Initiative</td>
<td>· Utilize an organizational framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Consultants utilized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Feedback sought from committee members and others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Periodically share related research with stakeholders to keep the Initiative in people’s consciousness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· New topics introduced at an appropriate pace</td>
</tr>
<tr>
<td>Manage the ideas, results and products (i.e. outputs) of the Initiative, as well as the will of the stakeholders, to ensure the Initiative’s effectiveness and alignment to school values; Manage the various aspects of the “change process”</td>
<td>Everyone involved with the Initiative or those who care about it have different beliefs on how the SRC should proceed and what it should implement (including some radical changes).</td>
<td>· Assess the outputs of the SRC and communicate its alignment with school values, and show how the results may positively influence other aspects of the school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Continually remind SRC of its charge, goals, and beliefs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· “Table” some SRC recommendations for a later time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Listen to stakeholders and educate them on the realities of the change process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Be willing to go after established school practices if they don’t align with the Initiative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Establish “confidants” who can provide candid feedback on the Initiative</td>
</tr>
</tbody>
</table>
## Category

Committee Processes

<table>
<thead>
<tr>
<th>Strains/Difficulties</th>
<th>Underlying Issue or Cause</th>
<th>How Coped With or Resolved</th>
</tr>
</thead>
</table>
| Ensure the Initiative makes a positive and substantial impact | Focusing too much attention on loosely relevant stress topics or making superficial changes to school structures could make much of the SRC’s work moot and breed resentment among stakeholders. | - Remind SRC of its goals  
- Assess potential impact an action will have on the school;  
- Measure effectiveness of actions and learn from the data  
- Do the “difficult” work that needs to be done (e.g. having tough conversations)  
- Do not be afraid to “Push the envelope” on some issues; let the chips fall where they may |
| Utilize existing structures when implementing SRC actions | It would be wasteful to create brand new structures to implement each SRC action. There are existing structures in place that can be tapped (e.g. incorporating stress content in the start-of-school student and parent assemblies). | - When new actions are recommended, assess the existing school structures before creating new ones to implement the action |
| Allow the Initiative to have an “organic” nature to it (i.e. to let it evolve naturally through the learnings and processes) | There is a natural tendency to bring issues raised to a conclusion, or to overly script aspects of the work. | - Promote dialogue among the SRC and stakeholders to allow new ideas and creativity to flourish  
- Relax some structures when working through an issue (e.g. allow the set agenda to deviate according to the direction of the SRC’s dialogue  
- Table some recommended actions until climate is better or more is learned about the issue and Initiative |
<table>
<thead>
<tr>
<th>Strains/Difficulties</th>
<th>Underlying Issue or Cause</th>
<th>How Coped With or Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control leadership bias</td>
<td>There is a natural tendency of a leader to steer the Initiative to a place the leader thinks it should go</td>
<td>· Remain mindful of this control bias</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Promote dialogue, when feasible, rather than discussion (to reduce coercion)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Stay open to new ideas and feedback on the direction of the Initiative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Distance the leader from the initiative when working with constituents (so as to limit people associating the initiative with the person rather than the issues)</td>
</tr>
<tr>
<td>Develop “thick skin” for personal attacks on the leader</td>
<td>Change efforts produce conflict, which is often focused on the leader of the reform. Some people will attack the person rather than the Initiative or the issues raised. This creates significant stress for the leader and requires courage on the leader’s behalf.</td>
<td>· Remember the critical importance of this Initiative to many stakeholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Reread (and collect new) testimonials from stakeholders on the stress problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Recognize this aspect of the school change process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Empathize with and involve the detractors in the Initiative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Dismiss personal attacks and don’t ruminate on them</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Fully engage in other responsibilities in the principal’s role (i.e. so people see the leader’s commitment to all aspects of school improvement, not just the Initiative—to build credibility)</td>
</tr>
<tr>
<td>Effectively model the beliefs and values of the Initiative</td>
<td>The leader is watched carefully to see if he is “walking the talk”. The leader also serves as a learning tool for the stakeholders and committee members.</td>
<td>· Remain mindful of this important task</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Seek feedback on one’s own actions and performance</td>
</tr>
<tr>
<td>Strains/Difficulties</td>
<td>Underlying Issue or Cause</td>
<td>How Coped With or Resolved</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overcome leader’s apprehension to have difficult conversations about teaching and learning with faculty</td>
<td>A natural inclination of people to maintain status quo and minimize conflict</td>
<td>· Remember the critical importance of this Initiative to many stakeholders&lt;br&gt;· Reread (and collect new) testimonials from stakeholders on the stress problem&lt;br&gt;· Embrace the challenge of school change&lt;br&gt;· Seize various opportunities to speak about the Initiative with stakeholders in order to become more comfortable with the act of doing so (i.e. “practice makes perfect”)</td>
</tr>
<tr>
<td>Ensure the leader can fully commit to his other obligations as principal</td>
<td>Leading the stress Initiative is not only challenging and engaging, but it consumes a large amount of time for the leader to manage the process of the committee. This fact creates the risk that other responsibilities of the principal’s role will not be adequately met.</td>
<td>· Delegate tasks, when feasible&lt;br&gt;· Pace the Initiative not only by what the SRC can handle, but what the leader can handle&lt;br&gt;· Make Initiative one of the formal school improvement goals</td>
</tr>
<tr>
<td>Ensure the leader stays on the path of “personal mastery” and learning (Senge, 2006)</td>
<td>The members of the SRC need to learn as well as lead the stress Initiative. The committee chair must understand the various topics and aspects of the work.</td>
<td>· Read relevant literature&lt;br&gt;· Accept feedback on Initiative from consultants and stakeholders&lt;br&gt;· Practice stress management strategies (those being promoted by the SRC)&lt;br&gt;· Revise organizational frameworks, when appropriate</td>
</tr>
<tr>
<td>Strains/Difficulties</td>
<td>Underlying Issue or Cause</td>
<td>How Coped With or Resolved</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Promote the Initiative beyond the JHS community without damaging it within the community | The local and national media latched on to the work of the SRC, perhaps due to the relevancy of stress as a societal problem for youth. Too much coverage breeds resentment from some teachers; however, bringing light to the issue and the SRC’s work may ultimately benefit schools across the country. | · Develop a media plan to use when requests are presented to the school (i.e. to pace the media’s access to the Initiative)  
· Seek feedback from faculty on the media coverage  
· Reject stories that focus on the leader rather than the Initiative |
| Recognize opportunities to connect the Initiative to other initiatives, issues, or professional practices at the school | Making connections to other important and valued initiatives or practices at the school can enhance the Initiative’s effectiveness and credibility. | · When new initiatives arise elsewhere, assess the degree the work connects to the Initiative  
· When SRC actions are developed, assess the degree it connects to other initiatives or practices at the school  
· Periodically share related research with stakeholders as the leader becomes aware of it |

**Key**  
SRC = Stress Reduction Committee  
BHI = Benson-Henry Institute for Mind-Body Medicine  
SIP = School Improvement Plan  
Initiative = the formal reform effort of the Stress Reduction Committee
Fourth finding

There existed consistencies as well as differences in perspectives within each subsample; the views of individual participants shared some common elements but participants also offered unique opinions on how they identified the challenges encountered while addressing the student stress problem. These are laid out in Table 4.6.

The teachers were acutely aware of the difficulties inherent in school change initiatives. Students shared a belief on the importance of students accepting their role and responsibility to address their own struggles with stress (a mature observation). Parents recognized the challenge of changing the behaviors of their peers, particularly when the graduation of their children was so close (i.e. the finish line).

Within the three subsample groups, however, participants maintained their unique perspectives through the observations they made. Participants were chosen to create a diverse set of data, and the strategy produced fruits toward this goal, as exhibited in Table 4.6.

There also existed consistencies as well as differences within the overall sample when data from subsamples were compared. Teacher buy-in—ownership and commitment over the stress problem—was identified as a primary challenge by each of the three groups: parents, students, teachers. The groups also recognized, in varying degrees, the challenges associated with school and behavioral change.

The teacher group mentioned committee processes more explicitly—what was working and what was not. This was perhaps due to their experience in other committee work at the school (and their comfort level in giving candid feedback). For unknown
reasons, students tended to focus more on the role of students in overcoming challenges than did the other two groups.

This finding illustrates that one can make some generalizations about the perspective of each stakeholder, but should do so with caution. The researcher found the individual viewpoints a richer source of data than the subsample or sample as a whole.

Table 4.6: Role-Ordered Differences and Consistencies Matrix
(Data sources are coded according to Instrument)

**Key**
II = Instrument 1 (Initial interview); I2 = Instrument 2 (Participant journaling)
I5 = Instrument 5 (Post-intervention interview)

<table>
<thead>
<tr>
<th>Subsample</th>
<th>Person</th>
<th>Participants’ Quotations on the Challenges Facing the Stress Reduction Committee</th>
<th>Consistencies within subsample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Tina</td>
<td>· Teacher buy-in (I1)</td>
<td>· Teacher buy-in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Some teachers feel they are being blamed for the stress problem, and have thus become defensive or resistant of the initiative (I5)</td>
<td>· Difficulty of school change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Teacher capacity to take on new initiatives (their load) (I1)</td>
<td>· Committee processes are critical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Ability of committee to be most effective, use good processes, focus on the right things (I2) (I5)</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>Lauren</td>
<td>· Changing established structures may meet resistance because of fear of hurting kids chances for college (I1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Time to meet as a committee and to utilize effective processes, and to not take on too much (initiative fatigue); getting diversity on the committee (I1) (I2) (I5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· The complexity and difficulty of moving a school culture (I1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Teachers truly understanding and appreciating the students’ perspective (empathy); teachers interpreting the committee’s messages and actions correctly (I1) (I2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Teacher buy-in: many teachers have misunderstood the committee’s work and goals (I5)</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>Larry</td>
<td>· Committee effectiveness and deciding what it wants to accomplish (I1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Teacher buy-in (I1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Peer pressure on teachers or from students or professional culture to meet the Jewel-on-the-Hill standard (I1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Overcoming the notion that we are coddling kids through this initiative (from teachers) (I1) (I5)</td>
<td></td>
</tr>
<tr>
<td>Subsample</td>
<td>Person</td>
<td>Participants’ Quotations on the Challenges Facing the Stress Reduction Committee</td>
<td>Consistencies within subsample</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| Students  | Zach   | · Getting people to see the value of the work (i.e. accept there is a problem) (I1)  
                     · Getting students and parents to change their behaviors, because of various reasons, including his own behavior (I1) (I2) | · Accepting one’s own role and responsibility over the stress problem (including changing one’s own behavior)  
                     · Communication as a key endeavor  
                     · Changing others behaviors will be a challenge (i.e. buy-in) |
|           | Camille| · Changing people’s behaviors (I1)  
                     · Helping students see their own part or role in the problem and not looking entirely outward for blame or remedy (I1) (I5)  
                     · Getting the messages out to as many people as possible (I2) and at early ages (I5) |        |
|           | Aaron  | · People accepting stress as a problem and dealing with it (I1)  
                     · Helping students see their own part or role in the problem and not looking entirely outward for blame or remedy (I1)  
                     · Overcoming the competitive peer culture (I1)  
                     · Explaining the committee’s work and goals to fellow students (I2)  
                     · Getting too much support from the media (I2)  
                     · Redefining the purpose of the committee and functioning smoothly (I5)  
                     · Buy-in from all the stakeholders (I5) |        |
| Parents   | Rosa   | · Will take long time to address because of entrenched culture (I1)  
                     · Teacher buy-in will be difficult (I1) as will parent buy-in (I5)  
                     · Changing behaviors of all (I1)  
                     · Educating the community on stress issues (I5) | · Changing behaviors of all will be a challenge  
                     · Teacher buy-in is critical |
|           | Susan  | · Buy-in will be different for everyone (I1) (I2)  
                     · Scope and complexity of the issue and addressing it (I1) (I2)  
                     · Changing behaviors (I1)  
                     · Resistance to put Jewel-on-the-Hill kids at a disadvantage for college admissions; must maintain with community that achievement will not be compromised by initiative (I1) (I2)  
                     · Determining where the committee should focus its efforts and how it best functions (I5)  
                     · Challenge of dealing with cultural issues (I5) |        |
Fifth finding

The participant-observer was able to fulfill a dual role in both actively participating in the identification of challenges (and its causes) associated with the initiative as well as stepping back to observe how the Committee-as-a-whole decided to respond to the strains and difficulties. Time, buttressed by exposure to literature and participation in discussions with the Committee, also proved an influence over the participant-observer’s reflection on the challenges. These observations are represented in Table 4.7.

The participant-observer’s reflective journal proved to be a rich source of data for organization and reflection on the initiative. He was able to view challenges in real time over the length of the study, offering him a time perspective. Observations of some challenges became clearer and more poignant over time (e.g. challenges associated with the leader), while others stayed consistently strong (e.g. developing teacher ownership and commitment to the initiative). The participant-observer’s exposure to research relevant to the stress initiative, as well as his active participation in Committee discussions supported this development of clarity.

The reflective journal could be used as a data source for advising the Committee on how to overcome a challenge or for the leader to make adjustments in his actions. This data collection was aided by the fact that many conversations about the challenges facing the initiative took place outside of Committee meetings. The dialogue often came from teachers, students, or parents not associated with the initiative, but who had an interest in seeing the Committee address the stress problem.
Table 4.7: Participant-Observer’s Perspective  
(Data source: Instrument #4—Journaling)

<table>
<thead>
<tr>
<th>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</th>
<th>Did it change over time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivering the stress messages without alienating or offending stakeholders (particularly teachers)</td>
<td>Became more sensitive over time</td>
</tr>
<tr>
<td>Keeping the media at bay</td>
<td>Became easier over time</td>
</tr>
<tr>
<td>Securing adequate funding for the initiative in difficult financial times</td>
<td>Became more critical over time</td>
</tr>
<tr>
<td>Achieving a balance between the need of the committee’s work to be public and transparent with the need for the committee to function in a more private environment conducive to learning and productivity</td>
<td>Became more transparent over time</td>
</tr>
<tr>
<td>Being mindful of the leader and committee members’ credibility on getting involved on certain issues (e.g. on teaching and learning issues)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Preventing the initiative from being more associated with people than with issues</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Preventing a specific action from becoming the “face” of the initiative (e.g. No Homework Calendar)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>How to use data effectively to influence the committee’s work and to make its case for school change</td>
<td>Became more of an imperative over time</td>
</tr>
<tr>
<td>How to effectively communicate the stress problem and the work of the committee to the stakeholders</td>
<td>Became more of an imperative over time</td>
</tr>
<tr>
<td>The makeup and functioning of the SRC: its diversity, size, ability to function effectively (i.e. processes), ability to organize its outputs.</td>
<td>Improved through practice</td>
</tr>
<tr>
<td>Coordinating all the actions of the committee and others so the stress initiative moves in a cohesive and consistent way</td>
<td>Becomes more challenging over time</td>
</tr>
<tr>
<td>Better incorporating parents into the stress initiative</td>
<td>Became more critical over time</td>
</tr>
<tr>
<td>Generating teacher “buy-in” on this issue</td>
<td>Consistent</td>
</tr>
<tr>
<td>Convincing the school community that the school’s reputation, its achievement results, and its record of college acceptances will not decline due to the stress initiative</td>
<td>Consistent</td>
</tr>
<tr>
<td>Keeping the committee’s focus narrow enough to address the problem effectively, but not too narrow so the problem is no longer pervasive among students (e.g. adding social stressors to academic stressors)</td>
<td>Consistent</td>
</tr>
</tbody>
</table>
**Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Did it change over time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectively communicating to the most important stakeholder in the initiative: the students</td>
<td>Consistent</td>
</tr>
<tr>
<td>Enlisting others in the school community to implement some action plans</td>
<td>Consistent</td>
</tr>
<tr>
<td>Choosing when to act on an issue or when to “table” it for another time, primarily for political reasons, without stalling momentum in the initiative</td>
<td>Consistent</td>
</tr>
<tr>
<td>Myths or misunderstandings about the stress issue can create barriers to “buy-in” (e.g. the myth that stress reduction is anti-rigor (and thus a bad thing))</td>
<td>Consistent</td>
</tr>
<tr>
<td>Combating the effect “toxic teachers” have on the initiative; engaging these dissenters in conversation so as to learn the nature of their resistance</td>
<td>Consistent</td>
</tr>
<tr>
<td>Changing the belief and value systems of stakeholders in order to influence their behaviors</td>
<td>Consistent</td>
</tr>
<tr>
<td>Incorporating all students into the stress initiative, not just the “high-achievers”</td>
<td>Consistent</td>
</tr>
<tr>
<td>Assessing the effectiveness of the initiative’s actions in order to learn</td>
<td>Consistent</td>
</tr>
<tr>
<td>Convincing students that the Benson-Henry Institute workshops were something they should participate in</td>
<td>Consistent</td>
</tr>
<tr>
<td>Satisfying the “instant gratification” nature of some people to want immediate results on a new initiative</td>
<td>Declined over time</td>
</tr>
</tbody>
</table>

**Sixth finding**

*Several themes could be identified from the challenges encountered by the members of the Committee.* These themes, which align closely with categories identified in the first finding of this research question, are represented in Table 4.8. From the multitude of observations, interviews, journaling, and other activities, data tended to fall into six distinct categories: (1) teacher buy-in, (2) committee processes, (3) school culture, (4) protecting the school’s existing values, (5) managing conflict, and (6) the
leader’s role. Themes provide utility because it allows the reader to identify areas where the greatest challenges are likely to originate.

Table 4.8: Theme-Ordered Conceptual Matrix
(Data source: All instruments)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Participant-Observer’s Observations and Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher buy-in</td>
<td>Without teacher support, changes at the school level proved very difficult to implement</td>
</tr>
<tr>
<td>Committee processes</td>
<td>Getting a diverse, unfamiliar, and busy group of volunteer committee members to function smoothly</td>
</tr>
<tr>
<td>School culture</td>
<td>Doing work that counteracts dominant and pervasive aspects of the existing school culture</td>
</tr>
<tr>
<td>Protecting the school’s existing values</td>
<td>All stakeholders were concerned that the school maintain its value of achievement (e.g. academic reputation, college acceptance, test scores, etc.) throughout the stress initiative</td>
</tr>
<tr>
<td>Managing conflict</td>
<td>Change breeds conflict, which must be managed for the effectiveness of the initiative (and leader). The media, in particular, proved a consistent and formidable challenge</td>
</tr>
<tr>
<td>The leader’s role</td>
<td>When a principal leads an initiative, his or her persona must be accounted for and addressed when necessary</td>
</tr>
</tbody>
</table>

The second research question produced six findings from data organized via four tables. A similar approach will be taken to present findings for the third research question. The findings are associated with the significant learnings from the stress initiative.

V. Findings Under the Third Research Question

The third research question surfaced data on the new learnings of the Committee participants during their work on the student stress problem. The views of each participant in the study, as well as the perspective from the participant-observer, were
considered in generating three findings. Notably, the three findings in this research question were consistent with the common triune of findings from the two previous research questions.

First finding

There existed consistencies as well as differences in perspectives within each subsample; the views of individual participants shared some common elements but participants also offered unique opinions on their new understandings developed while addressing the student stress problem. These are laid out in Table 4.9.

The teachers’ sense of efficacy toward addressing the student stress problem grew to the point where teachers came to believe that positive change was possible. The students continued to be introspective with the stress problem, reflecting on the importance of their role in both the problem and also the solution. As the Committee work progressed, parents became more empathetic toward the relationship all stakeholders had with stress.

There also existed consistencies as well as differences within the overall sample when data from subsamples were compared. Each of the three groups reported learning more about their personal relationship with stress, as well as about various factors in determining the stress problem. In addition, the groups developed a greater sense of empathy toward the unique challenges the other groups faced (e.g. the curricular pressures teachers were under, particularly in advanced courses.).
One aspect of the student group’s perspective represented the most significant difference between the three subsamples. The students identified the importance of early intervention with the stress problem, that school stress starts in middle school, or earlier. According to the students, the school and family should begin the teaching of coping mechanisms at a much earlier age than at adolescence.

This finding illustrates that one can make some generalizations about the perspective of each stakeholder, but should do so with caution.
Table 4.9: Role-Ordered Differences and Consistencies Matrix  
(Data sources are coded according to Instrument)

**Key**  
I1 = Instrument 1 (Initial interview)  
I2 = Instrument 2 (Participant journaling)  
I5 = Instrument 5 (Post-intervention interview)

<table>
<thead>
<tr>
<th>Subsample</th>
<th>Person</th>
<th>Participants’ Quotations on the New Learnings of the Stress Reduction Committee</th>
<th>Consistencies within subsample</th>
</tr>
</thead>
</table>
| Teachers  | Tina   | · Individuals have unique perspectives on the stress problem (I1)  
· Addressing stress can alter people’s lives for the better (I1); time has confirmed her belief in this (I5)  
· About how school change happens (I1) and its complex nature (I5)  
· Developed a broader definition of stress, partly because of the literature she was exposed to (I2), particularly Madeline Levine’s work (I5) | · Progress and change is possible  
· Developed a broader understanding over time |
| Teachers  | Lauren | · Learned how to better help her students with stress (I1)  
· Help faculty understand the student perspective and the toll stress is taking on kids (I1)  
· We need to keep bringing up the issue to keep it in people’s consciousness (I2)  
· The importance of relaxation techniques into the regular curriculum (I2)  
· Progress can be made, particularly around awareness, conversations, and people (including teachers) trying to change their behaviors (I2)  
· Admin investment in initiative is critical (I2)  
· Some teachers have worked well with the stress debate and others have not (I5)  
· Change is slow in this school’s culture (I5) | |
| Teachers  | Larry  | · Teachers can be effective helping their students manage stress, including offering encouragement. He has incorporated new techniques into his instruction to help his students’ stress, including prevention (I2) (I5)  
· The more active the committee, the more interested he is in it (I2)  
· He has learned a lot about the school’s culture (I5) | |
<table>
<thead>
<tr>
<th>Subsample</th>
<th>Person</th>
<th>Participants’ Quotations on the New Learnings of the Stress Reduction Committee</th>
<th>Consistencies within subsample</th>
</tr>
</thead>
</table>
| Students  | Zach   | • Realized that people see the stress problem differently depending on their perspective (I1)  
• Understanding different perspectives helps the committee take action (I1)  
• In examining his own life, he realizes he takes on too much (I2)  
• Students need stress intervention at an earlier age than high school; starting initiative earlier might be more effective (I2)  
• Change happens slowly (I2) (I5)  
• The connection between out of school behavior and in school manifestations (I2) (I5)  
• Believes he’ll be able to manage the challenges of college (self-efficacy) (I2) | • Views on stress problem are unique and individualized  
• Reflected more on their own relationship with stress as a result of committee participation  
• Believe stress intervention should happen in early grades  
• Changing a school’s culture is difficult work |
| Students  | Camille| • Everyone’s stress is unique to them (I1)  
• She has started to “calm down” as time passes and she’s more involved in the committee; she can exercise control over her stress (I1) (I2)  
• Word of mouth about the committee has helped awareness and progress (I2)  
• Get messages out to students at an earlier age (I2)  
• A lot of people want to help students with stress (I2) (I5)  
• Data can help make the stress problem valid (I2)  
• She has seen the faults of the traditional approach to educating seniors (I5) | |
| Students  | Aaron  | • Stress issue goes deeper than just what the school can handle, that mostly rests in the individual (I1)  
• Making sure the committee doesn’t spend too much time on one issue and forsaking the other important ones (I2)  
• How to better manage his stress through techniques (I2) (I5)  
• Defining the one word “stress” has been a lot tougher than he thought it would be (I5)  
• Creating the committee’s purpose was difficult to put into words (I5)  
• School change is difficult (I5) | |
### Subsample Participants’ Quotations on the New Learnings of the Stress Reduction Committee

<table>
<thead>
<tr>
<th>Person</th>
<th>Consistencies within subsample</th>
</tr>
</thead>
</table>
| Rosaline | - Has helped her deal with her own stress at work and resources she can use (I1) and what is most effective when addressing stress (I5)  
- Has developed a better understanding of stress’ effect on health and family (I1) and the difference between positive and negative stress (I5)  
- Has learned the value of backing off of her children and not hovering so much (I1)  
- Has a better understanding of the student perspective (empathy) (I2)  
- Has a better understanding of the individual nature of stress (I5)  
- Understands the difference between the urban and suburban contexts (I5) |
| Susan   | - Become more empathetic toward other perspectives  
- Became aware of own stress and practiced to reduce it  
- Developed a better understanding of the individual nature of stress |

### Second finding

The participant-observer was able to fulfill a dual role in both actively participating in identifying new learnings associated with the initiative as well as stepping back to observe how the Committee-as-a-whole developed new learnings. Time, buttressed by exposure to literature and participation in discussions with the Committee, also proved an influence over the participant-observer’s reflection on the challenges.

These observations are represented in Table 4.10.
As with the first two research questions, the participant-observer’s reflective journal proved a rich source of data for organization and reflection on the initiative. He was able to view new learnings monthly over the length of the study, offering him a time perspective. Observations of some learnings became clearer and more poignant over time (e.g. how the Committee best functioned), while others stayed consistently strong (e.g. the importance of buy-in or ownership on the initiative, particularly from teachers). The participant-observer’s exposure to research relevant to the stress initiative, as well as his active participation in Committee discussions supported this development of clarity.

The observations that form the reflective journal were derived from the Committee discussions and from seeing how actions were received by the community. When the researcher looked back at the accumulated reflections over the fifteen-month data collection period, the learnings became evident. Some insights came to the participant-observer came at the strangest times—driving to school, sitting in a conference workshop, etc. (This is consistent with brain research, which suggests insights come when the brain is in a more drowsy, unwound, and disorganized state (Lehrer, 2008).)
Table 4.10: Participant-Observer’s Perspective
(Data source: Instrument #4—Journaling)

<table>
<thead>
<tr>
<th>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</th>
<th>Did it change over time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some organizing templates proved very helpful to the committee, including: Topic Framework, Action Plan, Assessment Template</td>
<td>The useful ones were used and the others fell away</td>
</tr>
<tr>
<td>The value of the student perspective to both understand the stress problem and to develop appropriate responses</td>
<td>Increased</td>
</tr>
<tr>
<td>The interrelatedness of the various topics. E.g. homework can be a stressor, which can influence sleep, which can decrease functioning</td>
<td>Connections became clearer</td>
</tr>
<tr>
<td>The benefit of reflective listening by the committee’s leader and the need to be flexible with the committee processes to keep meetings flowing toward an authentic outcome</td>
<td>Flexibility &amp; listening increased over time</td>
</tr>
<tr>
<td>The committee functioned best in a steering role; this allowed it not to get overwhelmed with implementation issues</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>The stress problem’s complexity in that it has many faces to it, involved many interrelated issues, and generates strong emotions in people trying to speak about their relationship with or beliefs about stress</td>
<td>Understanding increased</td>
</tr>
<tr>
<td>Students will sometimes without solicitation force the stress issue into the open (e.g. asking a teacher to contact me about an issue; e.g. writing about stress in the student newspaper)</td>
<td>Increased</td>
</tr>
<tr>
<td>Personifying the stress problem resonated with the parents, in particular (e.g. role playing skits at parent assemblies; e.g. stories)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>As the stress problem was debated and addressed, and covered in the media, interest by colleagues outside of the district increased (including a private school in Hawaii); several area principals requested information</td>
<td>Increased</td>
</tr>
<tr>
<td>Salient issues tend to gain the committee’s attention in a way that is not forced by the leader</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>Education must precede any change in behavior by stakeholders, and the length of the education period depends on the individual’s needs</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td><strong>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</strong></td>
<td><strong>Did it change over time?</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>In some cases, your most resistant teacher may be “stress-sensitive” to his or her students (i.e. resistant to the initiative as-a-whole and not to the values and beliefs of it)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The initiative needs multiple spokesmen and cannot rely solely on a single voice (e.g. the leader’s)</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>Decreasing the frequency of meetings did not decrease the productivity of the group and may have kept it fresher for participants (and less stressful for the leader)</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>The goals, values, and messages attached toward any committee-related action should be communicated at the time of implementation (to reduce misunderstandings or prevent perpetuating myths)</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>The stress problem is communicated more effectively when it is tailored to the general perspective of each stakeholder (e.g. speaking to teachers about learning concerns and to parents about health concerns); a formal “Communication Plan” is needed</td>
<td>Became clearer over time</td>
</tr>
<tr>
<td>Data can be used to help promote “buy-in” and support from stakeholders</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Importance of aligning committee work with the school and district’s values and other improvement initiatives (to help make a case for its importance and relevancy)</td>
<td>Increased</td>
</tr>
<tr>
<td>Increased dialogue on the stress problem promotes dialogue within the school community, and some of that may never be heard by committee members</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The amount of discussion on the stress issue by the parent community is hard to gauge, but it could be pervasive (based on references to the initiative)</td>
<td>Became more common over time</td>
</tr>
<tr>
<td>The stress committee has a symbolic value to inspire teachers to talk about or address stress with their students</td>
<td>Increased</td>
</tr>
<tr>
<td>Resistance by some stakeholders sometimes has more to do with a lack of communication than a difference in values and beliefs (e.g. Faculty Council discussions over the initiative)</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</td>
<td>Did it change over time?</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A focus on stress culture evolved into a larger focus and discussion on school-wide culture</td>
<td>Became more evident over time</td>
</tr>
<tr>
<td>The interrelatedness of the stress issue allows one to connect it to many issues in the school community (e.g. course selection, parent communication, curriculum, etc.); the stress committee acted as a “connector” of these issues</td>
<td>Became easier to do over time</td>
</tr>
<tr>
<td>The committee frequently adjusted its meeting times and other processes to function more effectively</td>
<td>Consistent</td>
</tr>
<tr>
<td>The committee continually needed to return to its purpose, values, goals, etc., in order to better coordinate its actions and communication</td>
<td>Consistent</td>
</tr>
<tr>
<td>Incorporating research on best practice, as well as popular literature (e.g. business best-sellers), can positively influence the processes of the committee and fine-tune the focus of the initiative</td>
<td>Consistent</td>
</tr>
<tr>
<td>The stress initiative is sometimes referenced to support arguments on other issues that do not relate to the committee’s work (e.g. no longer sending the Honor Roll to the newspaper)</td>
<td>Consistent</td>
</tr>
<tr>
<td>In light of the complexity and challenge of addressing school stress and culture, it is important for the committee to reflect on its accomplishments and take some pride in them</td>
<td>Consistent</td>
</tr>
<tr>
<td>Learning as a committee requires “doing” (i.e. acting)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Controversial issues often seek a lightning rod for stakeholders to polarize around (e.g. the leader)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Addressing stress requires a balance between immediate, more pragmatic actions (e.g. stress management workshops) and longer term, more complex cultural work.</td>
<td>Consistent</td>
</tr>
<tr>
<td>Confidants can play a critical role in advising the leader what the pulse of the school is on a particular issue</td>
<td>Consistent</td>
</tr>
<tr>
<td>Voiced concern in a public forum over a proposed committee action sometimes does not represent the majority opinion of that stakeholder feels on the course of action (e.g. teacher video action plan)</td>
<td>Consistent</td>
</tr>
<tr>
<td>The work of the stress committee tends to follow an ebb and flow, with starts and stops, and some forward lurches (likely partly due to the school calendar)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Useful feedback on committee processes and focus can come from individual or small groups of committee members, delivered in a more private way</td>
<td>Consistent</td>
</tr>
<tr>
<td>Some Action Plans that were dormant or tabled became relevant or active when other Plans were created</td>
<td>Consistent</td>
</tr>
<tr>
<td><strong>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</strong></td>
<td><strong>Did it change over time?</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The national media coverage produced an overwhelmingly positive response from those outside of the school community; the same effect was not experienced locally (in some cases, the publicity hurt teacher buy-in efforts)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Existing problem-solving structures in the school can be used effectively when issues arise (e.g. Faculty Council to address the Homework Calendar concerns); timely addressing of issues is critical</td>
<td>Consistent</td>
</tr>
<tr>
<td>Achieving the support of the superintendent and other key supervisors or support persons is critical to the initiative’s success</td>
<td>Consistent</td>
</tr>
<tr>
<td>The conversation on student stress with a stakeholder can sometimes evolve into a discussion about their personal or professional stress (i.e. most people feel stress)</td>
<td>Consistent</td>
</tr>
<tr>
<td>Attributes needed for committee members and the leader: persistence, patience, positivism, and pressure</td>
<td>Consistent</td>
</tr>
<tr>
<td>The committee leader acted as caretaker to the Action Plans</td>
<td>Consistent</td>
</tr>
<tr>
<td>Stanford’s “Stressed Out Students Project” conferences proved very helpful to the leader and the committee</td>
<td>Consistent</td>
</tr>
<tr>
<td>The downtime of the summer proved a productive time to “step up to the balcony” and assess the initiative</td>
<td>Consistent</td>
</tr>
<tr>
<td>Before acting on an issue, relevant research needs to be examined in order to give the action a better chance of succeeding</td>
<td>Consistent</td>
</tr>
<tr>
<td>Existing structures (e.g. parent assemblies) can be used to communicate with or educate stakeholders</td>
<td>Consistent</td>
</tr>
<tr>
<td>Speaking to as many constituents or stakeholders as possible, in order to better understand their perspectives and get new ideas; keeping one’s “radar” up to learn more about the stress problem</td>
<td>Consistent</td>
</tr>
<tr>
<td>Modeling the stress management techniques for the group and others (e.g. breathing exercises) was important</td>
<td>Consistent</td>
</tr>
<tr>
<td>Using consultants (not part of the school) allowed for objective and alternative perspectives to influence the committee work</td>
<td>Consistent</td>
</tr>
<tr>
<td>“Buy-in” is absolutely necessary if change is to happen with teachers; moving too quickly without this support will jeopardize actions.</td>
<td>Consistent</td>
</tr>
<tr>
<td><strong>Participant-Observer’s Observations and Perspective on the Challenges Facing the Committee</strong></td>
<td><strong>Did it change over time?</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The Benson-Henry stress management workshop study produced positive results and served as an important source of data for the initiative</td>
<td>N/A</td>
</tr>
<tr>
<td>The stress website can be an effective communication vehicle</td>
<td>N/A</td>
</tr>
<tr>
<td>The full-day professional development workshop on student and teacher stress was a valuable experience for the participants and to the stress initiative</td>
<td>N/A</td>
</tr>
<tr>
<td>The committee member’s belief in the importance of the initiative became stronger over time (as they continued to be engaged in the work and learn more about the problem)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Third finding**

*Several themes could be identified from the new learnings identified by the members of the Committee.* These themes, some of which aligned closely to observations made to define the stress problem and with the challenges that the Committee faced, are represented in Table 4.11. From the collection of observations, interviews, journaling, and other activities, data tended to fall into thirteen distinct categories: (1) student voice, (2) opportunities to get involved, (3) the nature of change, (4) perspective and understanding, (5) committee processes, (6) communication, (7) outside influencers, (8) stakeholder stress, (9) data and research, (10) the leader’s role, (11) systemic thinking, (12) core values, and (13) impact. Themes allow the leader to identify areas where the greatest learnings are likely to originate.
Table 4.11: Theme-Ordered Conceptual Matrix  
(Data source: All instruments)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Participant-Observer’s Observations and Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student voice</td>
<td>Understanding the student perspective was critical to the stress initiative, as was tapping students for advice on how to address the stress problem. Personifying the stress problem through real and fictitious students proved particularly helpful.</td>
</tr>
<tr>
<td>Opportunities to get involved</td>
<td>There proved many opportunities for stakeholders to get involved in the stress initiative.</td>
</tr>
<tr>
<td>The nature of change</td>
<td>The SRC learned the complexities and difficulties associated with trying to change aspects of a school as well as the behavior of individuals.</td>
</tr>
<tr>
<td>Perspective and understanding</td>
<td>Over time, the individual’s understanding about the complexity and scope of the stress initiative grew substantially.</td>
</tr>
<tr>
<td>Committee processes</td>
<td>Over time, the SRC was able to determine which organizing documents proved helpful as well as other methods for the committee to function well as a team.</td>
</tr>
<tr>
<td>Communication</td>
<td>Communication became a central function of the SRC, both to educate and persuade stakeholders.</td>
</tr>
<tr>
<td>Outside influencers</td>
<td>Many individuals outside of the SRC provided useful advice and perspectives during the initiative, including consultants.</td>
</tr>
<tr>
<td>Stakeholder stress</td>
<td>Validating the stress of stakeholders other than students (e.g. teachers) became important to the initiative’s effectiveness and buy-in.</td>
</tr>
<tr>
<td>Data and research</td>
<td>Locally-collected data, combined with current research and popular literature, proved an important influence on the SRC.</td>
</tr>
<tr>
<td>The leader’s role</td>
<td>While the leader’s role has the potential to constrain an initiative, it proved important that the principal led the stress initiative.</td>
</tr>
<tr>
<td>Systemic thinking</td>
<td>Working through challenges and organizing the SRC’s work benefited from taking a systemic approach.</td>
</tr>
<tr>
<td>Core values</td>
<td>Core values, purpose, beliefs, goals, etc. became an important reference for overcoming challenges and setting the common direction of the initiative.</td>
</tr>
<tr>
<td>Impact</td>
<td>By design or not, some actions had little impact on the stress problem while others had a farther reaching influence.</td>
</tr>
</tbody>
</table>

The third research question produced three findings from data organized via three tables. A similar approach was taken to present findings for the fourth research question.

We will now move to findings associated with the results from the stress initiative.
VI. Findings Under the Fourth Research Question

The fourth research question surfaced data on the school-wide results associated with the Committee’s work on the student stress problem. The third data collection instrument provided the sole source of findings for this research question. Five findings have come out of the comprehensive collection of artifacts (e.g. documents, media).

First finding

Results could be categorized into specific types of results. Two types of results dominated the output of the Stress Reduction Committee: Organizing Documents and Action Plans. As mentioned in a previous section of this chapter, the Committee struggled to find working processes that would best facilitate efficiency and productivity toward its established goals. To help achieve this aim, several frameworks and documents were created. For example, the Topic Framework provided a tool to discuss a stress topic (e.g. sleep), and use the new understandings to recommend potential actions.

The Action Plan represented a “how-to” guide to implement ideas that would address a particular aspect of the stress problem (e.g. the seventh Action Plan outlined the development of the school’s stress website). Other Action Plans targeted homework, academic integrity, stress workshops, assemblies, and other items that the Committee deemed worthy of taking on.
Second finding

Results originated from a variety of sources, including the Stress Reduction Committee, groups or individuals associated with the initiative, and from those with no formal ties to the project. The origin of results came from interesting places. The Committee Chair (participant-observer) produced most of the Organizing Documents throughout the project and used them to communicate both within the Committee and also externally to the school community. Most of the early Action Plans in the stress initiative originated directly from the Committee itself. As time progressed and momentum in the change effort grew, other constituencies contributed to the formation of Action Plans (through the approval of the Chair). For example, the school’s Student Council took it upon itself, in the spirit of the stress initiative, to examine and make recommendations regarding online parental access to grades (the school grants web access to parents and students)—this became the tenth Action Plan. This phenomenon signified that even if one could not participate as a Committee member, one could still actively participate in the school improvement initiative.

Third finding

Results generated by the stress initiative were pervasively utilized by various individuals or groups in the school community. Not only did results originate from a variety of sources, the utility of some results stretched across wide swaths of the high school community. While the Committee were the sole users of the Organizing
Documents, other results proved helpful to particular groups in the school community, such as parents, students, and faculty:

- Students received the benefit of the school’s partnership with the Benson-Henry Institute for Mind/Body Medicine.
- Parents were the focus of the “Stress Missives” and the Parent Assemblies (on stress).
- Faculty were targeted for the Homework Calendar.

Some results could be utilized by all stakeholders, such as the Academic Integrity Action Plan and the creation of the stress website. Additionally, Jewel-on-the-Hill High School received many requests from neighboring schools (and across the country) for materials and information relating to the initiative. The significance of this finding was that while results typically addressed a specific item or issue (as we will see in the fifth finding), its contact with the school community could be diverse and far-reaching.

Fourth finding

The participant-observer could gauge the importance or impact of the various products and results in the stress initiative. The practicality of the results and the ability to see them implemented over the length of the Project allowed for an informal assessment of its impact. The participant-observer recorded these judgments in his reflective journal, including observations made by Committee members and others.

Several Organizing Documents proved quite helpful to the Committee—e.g. Action Plans; Topic Templates—while others were used sporadically and were dropped.
from use—e.g. Interrelatedness Chart; Allies. The impact of the Action Plans could be determined by either how many people could access the service or information, or by the richness in data and feedback it produced. For example, the Benson-Henry Institute’s stress management workshops affected one hundred-fifty students across two grades, while thousands have visited the stress website. The stress surveys produced both illuminating and useful data on stress-associated behaviors and beliefs, while the professional development provided to the faculty in November, 2007 generated positive feedback.

The significance of this finding lies in the use of the assessment, even if done informally. When one can gauge the effectiveness or impact of products, one can use this information to guide future Committee outputs. For example, one can determine the most effective way to reach stakeholders with the initiative’s messages and communication.

Fifth finding

Results tended to be associated with a specific purpose in relation to the stress initiative. Results were specific and targeted toward issues that the Committee or Chair deemed important and capable of being addressed. The Organizing Documents helped the Committee function better as related to a specific behavior or need (e.g. organizing testimonials on the stress problem). The Action Plans addressed one or more issues for examination or improvement (e.g. course selection process). The significance of this is that even if the purpose was a narrow one, specific products could be generated to make a positive impact more likely.
Table 4.12: Results Summarizer
(Data source: Instrument #3)

**Key:** OD = Organizing Document

<table>
<thead>
<tr>
<th><strong>Result</strong></th>
<th><strong>Developer(s)</strong></th>
<th><strong>User(s)</strong></th>
<th><strong>Importance</strong></th>
<th><strong>Salient Characteristics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee Minutes</td>
<td>Committee members</td>
<td>Committee</td>
<td>Low</td>
<td>Written record of the discussion and actions of the Committee</td>
</tr>
<tr>
<td>Topic Framework (OD)</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>Moderate</td>
<td>A framework used to discuss—in depth—various stress topics—sleep, down time, homework, academic dishonesty. The framework has various components to it (research, perspectives, etc.). It culminates in the development of actions.</td>
</tr>
<tr>
<td>SRC Charge (OD)</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>High</td>
<td>The central document that contains the Committee’s goals, processes, structures, and other guiding philosophies; it includes a communication plan</td>
</tr>
<tr>
<td>Interrelatedness Chart (OD)</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>Low</td>
<td>A table used to connect various stress topics to determine how issues may or may not relate to each other</td>
</tr>
<tr>
<td>Short-Term Tasks (OD)</td>
<td>Committee</td>
<td>Committee</td>
<td>Moderate</td>
<td>A list of Committee tasks that have time sensitivity; it serves to focus the Committee’s work on immediate tasks</td>
</tr>
<tr>
<td>Ideas Organizer (OD)</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>Moderate</td>
<td>A list of ideas on how to address various stress issues; it serves as an organizer and a resource</td>
</tr>
<tr>
<td>Status Report (OD)</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>High</td>
<td>A template used to allow the Committee to periodically assess its progress in meeting the goals of the initiative; it includes a time component to it</td>
</tr>
<tr>
<td>Sub-Committee Tracking (OD)</td>
<td>Consultant to the Committee</td>
<td>Committee Chair</td>
<td>Low</td>
<td>An organizer that allows the Chair to keep track of which Committee members and others are working on various projects</td>
</tr>
<tr>
<td>Result</td>
<td>Developer(s)</td>
<td>User(s)</td>
<td>Importance</td>
<td>Salient Characteristics</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------</td>
<td>---------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Allies (OD)</td>
<td>Committee Chair</td>
<td>Committee Chair</td>
<td>Low</td>
<td>A list of like-minded people who could become resources to the initiative, if needed; their area of expertise is included.</td>
</tr>
<tr>
<td>School Improvement Plan Update (OD)</td>
<td>Committee Chair</td>
<td>Committee Chair</td>
<td>High</td>
<td>A memo created to present the progress of the initiative to the School Committee; it includes an overview of the initiative, the stress problem, the achievements, future tasks, and challenges associated with the work.</td>
</tr>
<tr>
<td>Starting A SRC (OD)</td>
<td>Committee Chair</td>
<td>Schools</td>
<td>Moderate</td>
<td>The committee chair produced a document providing advice on how to start a stress initiative at a school. This was developed to meet a demand from other schools to emulate what JHS was doing.</td>
</tr>
<tr>
<td>Testimonials</td>
<td>Committee</td>
<td>Committee</td>
<td>Moderate</td>
<td>A collection of “stories” and opinions from various stakeholders who are not involved with the Committee; it is intended to help the Committee understand the various perspectives people carry on the stress problem.</td>
</tr>
<tr>
<td>Book Review Template</td>
<td>Committee Chair</td>
<td>Parents</td>
<td>Moderate</td>
<td>A template used by parents who volunteered to do book reviews; the document was posted on the Committee’s website</td>
</tr>
<tr>
<td>Action Plan Template*</td>
<td>Committee Chair</td>
<td>Committee</td>
<td>High</td>
<td>Adapted from Stanford’s “SOS Planning Guide”, this template was used any time the Committee chose to formally act to address the stress problem. Each plan is numbered and includes a link to a Committee goal, a list of resources needed to be successful, and how the action will be assessed for effectiveness. It also maps out each step of the plan over a timeline and assigns responsibility for each step.</td>
</tr>
<tr>
<td>Result</td>
<td>Developer(s)</td>
<td>User(s)</td>
<td>Importance</td>
<td>Salient Characteristics</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Action Plan #2:</td>
<td>Committee Chair</td>
<td>Faculty</td>
<td>High</td>
<td>This calendar garnered a lot of attention from all stakeholders, becoming a sort of lightning rod to debate the merits of the stress initiative.</td>
</tr>
<tr>
<td>Homework Calendar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #4:</td>
<td>Committee</td>
<td>HS Admin.</td>
<td>High</td>
<td>A series of PowerPoint presentations were created for the start-of-school parent and student assemblies.</td>
</tr>
<tr>
<td>Parent &amp; Student Assemblies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #6:</td>
<td>Parents</td>
<td>Website viewers</td>
<td>Moderate</td>
<td>Book reviews were submitted by parents for placement on the stress website; a template was utilized.</td>
</tr>
<tr>
<td>Book Reviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #7:</td>
<td>Committee Chair &amp; student</td>
<td>School Community</td>
<td>High</td>
<td>For the better part of a year, a website was developed to provide a wealth of resources on the stress initiative.</td>
</tr>
<tr>
<td>Website</td>
<td>volunteer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #8:</td>
<td>Committee</td>
<td>HS Admin.</td>
<td>High</td>
<td>Three distinct, yet interrelated, surveys were created and administered for the spring, 2008. Parents, students, and teachers were surveyed.</td>
</tr>
<tr>
<td>Surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #10:</td>
<td>Committee Chair &amp; Student</td>
<td>Parents &amp; Students</td>
<td>Moderate</td>
<td>A contract was developed to allow students to self-manage their online gradebook (asking parents to refrain from using the service.)</td>
</tr>
<tr>
<td>PowerSchool</td>
<td>Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #12:</td>
<td>Committee Chair</td>
<td>Students</td>
<td>High</td>
<td>To help students gain skills to manage their stress, the school partnered with the Benson-Henry Institute for Mind-Body Medicine to offer a series of workshops to sophomore and junior volunteers. Students agreed to participate in a study measuring the effectiveness of the workshops.</td>
</tr>
<tr>
<td>Benson-Henry Inst.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result</td>
<td>Developer(s)</td>
<td>User(s)</td>
<td>Importance</td>
<td>Salient Characteristics</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Action Plan #13: Academic Integrity</td>
<td>School Council</td>
<td>Teachers</td>
<td>Moderate</td>
<td>Through the site-based council, the Ethics Policy was revised to include current research and preventative strategies to promote academic integrity. Cheating is considered a relevant topic to the stress problem.</td>
</tr>
<tr>
<td>Action Plan #14: Faculty Professional</td>
<td>Committee</td>
<td>Admin &amp; Teachers</td>
<td>High</td>
<td>A full-day professional development workshop was conducted in November 2007 to educate and provide stress management techniques to teachers. An agenda and accompanying resources were developed.</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #15: Parent Newsletter</td>
<td>Committee Chair &amp; Parent</td>
<td>Parents</td>
<td>High</td>
<td>The newsletters served as an important vehicle to communicate stress content and the work of the committee.</td>
</tr>
<tr>
<td></td>
<td>Volunteers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #17: School Culture</td>
<td>Committee Chair &amp; Faculty</td>
<td>School Community</td>
<td>High</td>
<td>An initiative was launched by the school administration to improve school culture. The topic relates strongly to the stress initiative (relationship-building, for example).</td>
</tr>
<tr>
<td></td>
<td>Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Plan #18: Course Selection Process</td>
<td>Committee &amp; Admin.</td>
<td>School Community</td>
<td>Moderate</td>
<td>This action plan attempted to examine the annual course selection process and make adjustments to lessen stress or to better align the process with the initiative’s values. Three aspects of the process were changed: (1) students completed a “Time Management Activity” worksheet to help them see the totality of their decisions; (2) a form was created for students (instead of parents) to request an override of a teacher’s placement recommendation (parents were cut out of the process); and (3) teachers were allowed to enter directly into the school’s database their placement recommendations (thereby reducing students placing pressure on teachers).</td>
</tr>
<tr>
<td>Result</td>
<td>Developer(s)</td>
<td>User(s)</td>
<td>Importance</td>
<td>Salient Characteristics</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>---------</td>
<td>------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Action Plan #19: Senior Care Package</td>
<td>Student Committee Members</td>
<td>Students</td>
<td>Low</td>
<td>Graduating seniors (350) were given a care package consisting of a journal with words of wisdom.</td>
</tr>
<tr>
<td>Parent Stress Missives</td>
<td>Committee Chair</td>
<td>Parents</td>
<td>Moderate</td>
<td>The committee chair created letters—mailed three times from Aug 07 – Aug 08—to send to all parents highlighting the work of the committee and providing advice.</td>
</tr>
</tbody>
</table>

* The following Action Plans were created but did not result in the creation of a result during the data collection period:
  #3 – Homework policy
  #9 – School values connection
  #11 – Student voice initiative
  #16 – Weighted grade point average analysis
  #21 – “How to be successful” publication
The rich data from the study produced several findings across the four research questions. To bring to an end to this chapter, but before going on to the summary, discussion, and implications of the findings in chapter five, we will review findings that did not relate specifically to a research question, but were nevertheless significant and worth mention.

VII. Other Findings

Findings in this section can be arranged into three categories: (1) time; (2) opportunities for stakeholder involvement; and (3) the level of assistance given to actions. Tables are provided to illuminate the findings in each area.

First finding (time)

Events were widely and consistently distributed over time. Table 4.13 illustrates that once the Committee began meeting, a degree of momentum was achieved that drove the work during the school year. The summer break also proved productive to the initiative. Events such as meetings, retreats, assemblies, and the creation of results, were widely and consistently distributed over the course of the project and data collection period. The significance of this finding is that the Stress Reduction Committee was able to achieve momentum in its initiative despite the uniqueness of the school calendar.

Second finding (time)

The events, consistently over time, illustrated a combination of meetings and Action Plan implementation. Table 4.13 records the frequency of events over the course
of the data collection period. It also records the types of events, which typically took the form of Committee meetings, results from Action Plans (e.g. launch of the website), and activities associated with the spirit of the initiative (e.g. creation of a faculty running club). These types of events were pervasive during the school calendar. This finding signifies the Committee’s ability to weave strategy development for the initiative (as a team) with implementation of the Action Plans. The “planning and doing” approach was deliberate as the group worked toward its goals.
Table 4.13: Event Listing  
(Data Source: Instruments #3 (Results) & #4 (Reflective Journaling))

<table>
<thead>
<tr>
<th>Pre-March 07</th>
<th>March 07</th>
<th>April 07</th>
<th>May 07</th>
<th>June 07</th>
<th>Summer 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Stress Survey (Feb 06)</td>
<td>First SRC Meeting</td>
<td>SRC Meeting</td>
<td>SOS Conference</td>
<td>SRC Meeting (6/19)</td>
<td>BHI meeting</td>
</tr>
<tr>
<td>SOS Conference (May 05)</td>
<td>SRC Meeting (5/3)</td>
<td>SRC Consultant begins work</td>
<td>BHI partnership meetings begin</td>
<td>SRC Meeting (5/17)</td>
<td></td>
</tr>
<tr>
<td>September 07</td>
<td>October 07</td>
<td>November 07</td>
<td>December 07</td>
<td>January 08</td>
<td>February 08</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SRC Meeting (9/13)</td>
<td>SRC Meeting (10/4)</td>
<td>SRC Meeting (11/14)</td>
<td>SRC Meeting (12/6)</td>
<td>SRC Meeting (1/15)</td>
<td>SRC Meeting (2/8)</td>
</tr>
<tr>
<td>Student assemblies</td>
<td></td>
<td>Faculty Council meeting on stress initiative</td>
<td></td>
<td>Student newspaper publishes several stress articles</td>
<td>Student newspaper article</td>
</tr>
<tr>
<td>Parent assemblies</td>
<td></td>
<td>First stress article appears in student newspaper</td>
<td>JHS Principal presents to area principals</td>
<td>Faculty running club begins</td>
<td>SRC Meeting (1/29)</td>
</tr>
<tr>
<td>First Stress Missive mailed home</td>
<td></td>
<td></td>
<td>Student Council sends memo to Principal about PowerSchool</td>
<td>SOS Followup workshop: Principal attends</td>
<td>BHI workshops delivered to juniors</td>
</tr>
<tr>
<td>BHI workshops finalized</td>
<td></td>
<td>Faculty PD delivered (11/26)</td>
<td></td>
<td>New faculty join SRC</td>
<td></td>
</tr>
<tr>
<td>SRC Meeting (9/20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NY Times article appears on pg. 1
<table>
<thead>
<tr>
<th>March 08</th>
<th>April 08</th>
<th>May 08</th>
<th>June 08</th>
<th>Summer 08</th>
<th>September 08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal speaks at nearby church forum</td>
<td>BHI workshops delivered to sophomores</td>
<td>BHI meeting to discuss 08-09 partnership</td>
<td>Faculty stress survey administered</td>
<td>Parent stress survey administered</td>
<td>Parent assemblies</td>
</tr>
<tr>
<td>Student newspaper editorial on stress initiative</td>
<td></td>
<td>Retreat for SEL takes place by a task force of teachers</td>
<td>Parent task force meets to discuss newsletter (6/17)</td>
<td>SRC Retreat (8/26)</td>
<td>Third Stress Missive mailed home</td>
</tr>
<tr>
<td>SRC Meeting (3/18)</td>
<td></td>
<td>SRC Meeting (5/8)</td>
<td>SRC Update Memo (SIP) presented to School Committee</td>
<td>Website Launched</td>
<td>SOS Conference Attendance as a Team of 6</td>
</tr>
<tr>
<td>District leadership retreat on stress topics</td>
<td></td>
<td>Joint Faculty Council-Student Council meeting on school culture</td>
<td>Stress initiative update at final faculty meeting</td>
<td>SEL Retreat – Part 2</td>
<td>New teacher meeting included stress content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student stress survey administered</td>
<td></td>
<td>BHI meetings to plan partnership</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SRC Meeting (5/22)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key**
- SRC = Stress Reduction Committee
- SOS = Stanford’s Stressed Out Students Conference
- BHI = Benson-Henry Institute for Mind-Body Medicine
- SEL = Social and emotional learning initiative
- SIP = School Improvement Plan
Table 4.14 organizes data that form the following three findings:

Third finding (time)

*Committee member participation vacillated between high and moderate levels.*

Members were committed to the project, but both the month in the school calendar and the functioning of the SRC (meetings did not always meet consistently) appeared to influence participation. Member interest and availability fluctuated over the fifteen months of data collection. These observations signify the existence of an ebb and flow of Committee functioning that derived from the varying needs of the project and from the idiosyncrasies of individuals.

Fourth finding (time)

*The participation of the participant-observer remained high during the entire data collection period.* The bulk of the Project took place in the planning stage (Deal and Peterson, 1994) and Table 4.14 presents involvement over time across five time periods: Pre-Planning, Early Planning, Summer 2007, Mid-Planning, and Mid-Post Planning. Even though the participant-observer’s leadership activities varied somewhat over time (e.g. heavy planning and organization in the early stages and greater implementation as the project unfolded), his involvement in the project stayed consistently high. This signified the needs associated with leading the stress initiative.
**Fifth finding (time)**

*Involvement by others in the school increased after the project exited the early Planning stage.* The significance of this finding is found in the growing needs of the stress initiative. Community awareness of the initiative and the needs of Action Plan implementation increased as momentum was captured. This proved a call for others to get involved in the project, both by Committee request (e.g. parents enlisted to work on communication) and by individuals or groups feeling empowered to get involved (e.g. the student newspaper writing columns on school stress). The positive phenomenon is what one hopes to achieve when a reform initiative affects the whole school community.

Table 4.14: Scatterplot of Involvement Over Time  
(Data source: Instrument #4)

<table>
<thead>
<tr>
<th>Level of Involvement Over Time</th>
<th>Pre-Planning (prior to March 07)</th>
<th>Early Planning (March 07 – June 07)</th>
<th>Summer 07</th>
<th>Mid Planning (Sept. 07 – Dec 07)</th>
<th>Mid-Post Planning (Jan 08 – June 08)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>PO</td>
<td>PO CP, CS, CT</td>
<td>PO</td>
<td>PO CP, CS, CT</td>
<td>PO</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>CP, CS, CT</td>
<td>OP, OT, OS, OA</td>
<td>CP, CS, CT OP, OT, OS</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>OP, OT, OS, OA</td>
<td>OP, OT, OS, OA</td>
<td>OP, OT, OS, OA</td>
<td></td>
<td>OA</td>
</tr>
</tbody>
</table>

**Key**  
Participant-Observer/ Committee Leader (PO)  
Committee Parents (CP)  
Committee Teachers (CT)  
Committee Students (CS)  
Other Students (OS)  
Other Parents (OP)  
Other Teachers (OT)  
Other Administrators (OA)
Sixth finding (involvement)

There were various ways for participants on the Committee as well as others to get involved in the project. Four areas for contribution could be delineated from the data: (1) active participation as a Committee member; (2) providing new ideas to the Project; (3) participation in implementing an Action Plan; and (4) sharing one’s perspective, or testimonial, on the stress problem (promoting empathy, as a result). Even if community members decided not to join the Committee (all volunteers were accepted), there were other important ways to help the initiative, from providing direction to simply offering one’s thoughts on the problem. This signifies the inclusive nature of the stress initiative.

Seventh finding (involvement)

The number of people involved in the project varied between small, moderate, and large. In looking at the four main ways people participated in the stress initiative, one can quantify in a general way the size of the involvement. Testimonials provided the easiest way to participate in the initiative and as a result, garnered the greatest number of contributors (e.g. scores of people sent e-mails to the participant-observer’s or stress initiative’s address). Several testimonials contained suggestions on how the Stress Reduction Committee could be most effective; many others simply sent their ideas to the Chair.

A moderate number of people chose to get involved in the implementation of Action Plans (e.g. revising the academic integrity policy); this involvement was typically ad hoc. Finally, becoming a member of the Committee was the most labor intensive and thus
attracted the fewest number of participants in the initiative. This finding signifies that the size of involvement was based on the particular needs and time commitment required for the task at hand.

*Eighth finding (involvement)*

*The amount of time and effort committed to the project varied between low, moderate, and high levels.* In again looking at the four main ways people participated in the stress initiative, one can quantify in a general way the amount of time and effort the opportunity for involvement dictated. Testimonials provided the quick and low-effort way to participate in the initiative (although the communications were often emotionally taxing). Ideas were typically well thought out, but also were quick and required little effort.

When a person who offered an idea received the go-ahead by the Committee, their commitment of time and effort increased, as one might expect. Full Committee participation typically involved both sitting in meetings and implementing Action Plans, and thus represented the highest commitment of time and effort to the project. As with the previous finding, this observation signifies that the amount of time and effort required for involvement was based on the particular need of the task at hand.
Table 4.15: Opportunities for Involvement Matrix  
(Data source: Instrument #4)

PARENTS

<table>
<thead>
<tr>
<th>Involvement Opportunity</th>
<th>Size of Involvement (# Involved) (Large, Mod, Small)</th>
<th>Degree of Involvement – Time or Effort Committed (High, Mod, Low)</th>
<th>Comments on Involvement (from perspective of Participant-Observer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testimonials</td>
<td>Large</td>
<td>Low</td>
<td>Helped provide a clearer picture of the stress problem from this unique perspective</td>
</tr>
<tr>
<td>Committee Participation</td>
<td>Small</td>
<td>High</td>
<td>Provided direct impact on actions taken to address the stress problem</td>
</tr>
<tr>
<td>Organizing Documents</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on effective committee processes</td>
</tr>
<tr>
<td>Action Plan #4: Parent &amp; Student Assemblies</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of these assemblies</td>
</tr>
<tr>
<td>Action Plan #6: Book Reviews</td>
<td>Moderate</td>
<td>High</td>
<td>Created these reviews for the website</td>
</tr>
<tr>
<td>Action Plan #7: Website</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of the website</td>
</tr>
<tr>
<td>Action Plan #8: Surveys</td>
<td>Small</td>
<td>High</td>
<td>Created all three surveys</td>
</tr>
<tr>
<td>Action Plan #13: Academic Integrity</td>
<td>Small</td>
<td>Moderate</td>
<td>Parents on School Council offered important feedback on the revision of the Ethics Policy; a parent wrote the first draft of the policy</td>
</tr>
<tr>
<td>Action Plan #15: Parent Newsletter</td>
<td>Moderate</td>
<td>High</td>
<td>Created each issue for this important communication vehicle</td>
</tr>
<tr>
<td>Action Plan #18: Course Selection Process</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the revision of the process</td>
</tr>
<tr>
<td>Involvement Opportunity</td>
<td>Size of Involvement (# Involved) (Large, Mod, Small)</td>
<td>Degree of Involvement – Time or Effort Committed (High, Mod, Low)</td>
<td>Comments on Involvement (from perspective of Participant-Observer)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Testimonials</td>
<td>Large</td>
<td>Low</td>
<td>Helped provide a clearer picture of the stress problem</td>
</tr>
<tr>
<td>Committee Participation</td>
<td>Small</td>
<td>High</td>
<td>Provided direct impact on actions taken to address the stress problem</td>
</tr>
<tr>
<td>Organizing Documents</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on helping the committee processes</td>
</tr>
<tr>
<td>Action Plan #2: Hmk Calendar</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on this initiative</td>
</tr>
<tr>
<td>Action Plan #4: Parent &amp; Student Assemblies</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of these assemblies</td>
</tr>
<tr>
<td>Action Plan #7: Website</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of the website</td>
</tr>
<tr>
<td>Action Plan #8: Surveys</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Provided important feedback on the survey questions and piloted the student survey</td>
</tr>
<tr>
<td>Action Plan #10: PowerSchool</td>
<td>Large</td>
<td>Moderate</td>
<td>Helped develop the “Parent-Student Contract”</td>
</tr>
<tr>
<td>Action Plan #12: Benson-Henry</td>
<td>Large</td>
<td>High</td>
<td>Students were the sole participants in the stress workshops</td>
</tr>
<tr>
<td>Action Plan #13: Academic Integrity</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Students on School Council offered important feedback on the revision of the Ethics Policy and created a special advice section for students</td>
</tr>
<tr>
<td>Action Plan #17: School Culture</td>
<td>Moderate</td>
<td>High</td>
<td>Student Council were key stakeholders and participants in this initiative, which included a student voice component</td>
</tr>
<tr>
<td>Action Plan #18: Course Selection Process</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the revision of the process</td>
</tr>
<tr>
<td>Action Plan #19: Senior Care Package</td>
<td>Small</td>
<td>Moderate</td>
<td>Student members of the committee implemented the idea</td>
</tr>
<tr>
<td>Involvement Opportunity</td>
<td>Size of Involvement (# Involved) (Large, Mod, Small)</td>
<td>Degree of Involvement – Time or Effort Committed (High, Mod, Low)</td>
<td>Comments on Involvement (from perspective of Participant-Observer)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>Testimonials</td>
<td>Large</td>
<td>Low</td>
<td>Helped provide a clearer picture of the stress problem from this unique perspective</td>
</tr>
<tr>
<td>Committee Participation</td>
<td>Small</td>
<td>High</td>
<td>Provided direct impact on actions taken to address the stress problem</td>
</tr>
<tr>
<td>Organizing Documents</td>
<td>Moderate</td>
<td>Low</td>
<td>Provided important feedback on effective committee processes</td>
</tr>
<tr>
<td>Action Plan #2: Homework Calendar</td>
<td>Large</td>
<td>Moderate</td>
<td>Created calendar in partnership with JHS principal</td>
</tr>
<tr>
<td>Action Plan #4: Parent &amp; Student Assemblies</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of these assemblies</td>
</tr>
<tr>
<td>Action Plan #7: Website</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the content of the website</td>
</tr>
<tr>
<td>Action Plan #8: Surveys</td>
<td>Small</td>
<td>Moderate</td>
<td>Provided important feedback on the survey questions and piloted the teacher survey</td>
</tr>
<tr>
<td>Action Plan #13: Academic Integrity</td>
<td>Large</td>
<td>Moderate</td>
<td>Teachers on School Council offered important feedback on the revision of the Ethics Policy.</td>
</tr>
<tr>
<td>Action Plan #14: Faculty Professional Development</td>
<td>Large</td>
<td>Moderate</td>
<td>Faculty members of the committee developed the content and activities for this experience</td>
</tr>
<tr>
<td>Action Plan #17: School Culture</td>
<td>Large</td>
<td>High</td>
<td>Faculty Council is the key participant in this initiative</td>
</tr>
<tr>
<td>Action Plan #18: Course Selection Process</td>
<td>Small</td>
<td>Low</td>
<td>Provided important feedback on the revision of the process</td>
</tr>
</tbody>
</table>
Table 4.16 organizes data that form the final two findings, based on the degree of assistance given to various results and to stakeholders. Measurement of the level of assistance was determined exclusively by the participant-observer via his reflective journaling (Instrument 4).

Ninth finding (assistance)

Results needed various levels of assistance by the SRC and by the participant-observer. The bulk of the results came in the form of either Organizing Documents or Action Plans. The templates and tables used to help the Committee function well were created primarily by the participant-observer. The amount of time he needed to spend depended on the complexity of the document (e.g. the Status Report required constant tweaking and data entry, while the Allies document was simply a list of people interested in helping the project).

The Action Plans, on the other hand, required various degrees of assistance by Committee members or the participant-observer. For example, the website was best developed by only a few people, while creating the stress surveys was mostly delegated to Committee members and took a moderate level of input. Finally, a task like revising the academic integrity policy required significant oversight and assistance. In looking for the significance of this finding, one can see that the level of assistance needed for both Organizing Documents and Action Plans were dependent on the unique needs of the result.
Tenth finding (assistance)

The level of assistance provided by the SRC and by the participant-observer to stakeholders often differed. The school’s partnership with the Benson-Henry Institute required the Principal (i.e. participant-observer) to broker the type of services and delivery for such. It would neither be efficient nor appropriate to delegate such a task to Committee members. Another example of the difference in assistance was found in the Course Selection Action Plan. Several facets of the Plan, which supplemented the course selection process but did not change it significantly, were delegated to faculty members, Committee members, or to students. While the involvement was significant, the oversight by the participant-observer was minimal. The different level of assistance provided by the SRC and the participant-observer signifies the different roles and responsibilities of each group and person, and also the unique needs of the results. Because of his role as the leader of the school, the participant-observer involved himself in the more complex or politically sensitive tasks.
<table>
<thead>
<tr>
<th>Result</th>
<th>Developer</th>
<th>Level of Assistance by Committee</th>
<th>Level of Assistance by PO</th>
<th>Comment Regarding Assistance by Participant-Observer (PO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Documents</td>
<td>PO C</td>
<td>Moderate</td>
<td>High</td>
<td>· PO was the primary developer of these guiding documents (e.g. “SRC Charge”)</td>
</tr>
<tr>
<td>Action Plan #2: Homework Calendar</td>
<td>PO OT</td>
<td>Low</td>
<td>High</td>
<td>· This document turned into a lightning rod with the school community, thus requiring substantial involvement by the PO</td>
</tr>
<tr>
<td>Action Plan #4: Parent &amp; Student Assemblies</td>
<td>PO C OA</td>
<td>Moderate</td>
<td>High</td>
<td>· The involvement was high because PO was delivering the stress content at each assembly</td>
</tr>
<tr>
<td>Action Plan #6: Book Reviews</td>
<td>CP OP</td>
<td>Low</td>
<td>Low</td>
<td>· Parents took this project and ran with it.</td>
</tr>
<tr>
<td>Action Plan #7: Website</td>
<td>OS OT PO</td>
<td>Low</td>
<td>High</td>
<td>· Periodic assistance given at first to web designer; PO took over final stages of the website when production lagged</td>
</tr>
<tr>
<td>Action Plan #8: Surveys</td>
<td>C</td>
<td>High</td>
<td>Moderate</td>
<td>· PO primarily helped with period feedback and with the administration of the surveys</td>
</tr>
<tr>
<td>Action Plan #10: PowerSchool</td>
<td>PO OS</td>
<td>Low</td>
<td>Moderate</td>
<td>· PO worked with Student Council to develop the “Parent-Student Contract”</td>
</tr>
<tr>
<td>Action Plan #12: Benson-Henry Inst.</td>
<td>PO</td>
<td>Low</td>
<td>High</td>
<td>· PO worked extensively with this partner to cultivate the relationship and deliver the stress workshops to students</td>
</tr>
<tr>
<td>Result</td>
<td>Developer</td>
<td>Level of Assistance by Committee</td>
<td>Level of Assistance by PO</td>
<td>Comment Regarding Assistance by Participant-Observers (PO)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>----------------------------------</td>
<td>---------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>Action Plan #13: Academic Integrity</td>
<td>PO</td>
<td>Low</td>
<td>High</td>
<td>· PO worked with School Council to revise the school’s Ethics Policy</td>
</tr>
<tr>
<td>Action Plan #14: Faculty Professional Development</td>
<td>CT</td>
<td>Moderate</td>
<td>High</td>
<td>· PO worked closely with committee teachers to develop and deliver the professional development experience</td>
</tr>
<tr>
<td>Action Plan #17: School Culture</td>
<td>PO</td>
<td>Low</td>
<td>High</td>
<td>· PO worked closely with Faculty Council and Principal’s Administrative Cabinet to develop and implement the school culture initiative</td>
</tr>
<tr>
<td>Action Plan #18: Course Selection Process</td>
<td>PO</td>
<td>Low</td>
<td>Moderate</td>
<td>· PO helped create “Time Management Activity” document and approved the other changes</td>
</tr>
<tr>
<td>Action Plan #19: Senior Care Package</td>
<td>PO</td>
<td>Low</td>
<td>Low</td>
<td>· Student members of the committee developed and implemented this project</td>
</tr>
<tr>
<td>Parent Stress Missives</td>
<td>PO</td>
<td>Low</td>
<td>High</td>
<td>· PO wrote and distributed these letters</td>
</tr>
</tbody>
</table>

**Key**
- Participant-Observer/ Committee Leader (PO)
- Committee (C)
- Committee Parents (CP)
- Committee Students (CS)
- Committee Teachers (CT)
- Other Students (OS)
- Other Parents (OP)
- Other Teachers (OT)
- Other Administrators (OA)
- Other Group (OG)
VIII. Preview of Chapter Five

The data collected during the fifteen-month period of the Study yielded a multitude of findings across four research questions and beyond. Chapter five will provide the reader with a summary of findings, including those that cut across all research questions or those that are so significant they are worth mentioning again. The chapter will also include putting the study’s findings to a litmus test against the major theoretical concepts and research studies outlined in chapter two. A natural outflow of this reflection will be statements on the implications the study has for practitioners of school-based educational reform, for policy wonks, and for further research. It will end with a reflection on how the participant-observer’s leadership was enhanced by the project and the study.
Chapter Five

Discussion of Findings

I. Introduction

The song is to the singer, and comes back most to him.

- Walt Whitman

Chapter five presents the author’s analytical interpretation of the findings as well as his discussion on the significance of the findings as it relates to the theoretical landscape detailed in chapter two. In this fifth chapter, the author provides the implications of the study’s findings. He also reflects on how the study influenced his own leadership development. The terms “project” and “initiative” are used interchangeably to represent the school improvement effort taken on by the Stress Reduction Committee (SRC).

Chapter five has been organized in the following way:

- **Summary of findings:** a recap of what the study was and the specific research questions in which data was collected. Answers to the research questions are provided.

- **Discussion of findings:** what was important (i.e. the larger logic in the findings) and an analysis of the findings from each of the research questions, as found in the data.

- **Limitations to the study:** factors that could potentially bias the findings, which require the reader to take caution in applying the findings to other settings.

- **Implications for practice:** a review on how the study’s findings could influence school leadership practice.
- *Implications for further research*: areas in which the author suggests further study take place.

- *Implications on participant-observer’s leadership*: a reflection on how the author’s leadership style and practices were influenced by the study.

- *Conclusion*: an opportunity to thank the study’s participants and offer a last reflection on the study.

II. Summary of Findings

“Examining and addressing academic stress in a suburban high school” was an ethnographic descriptive case study (Merriam, 1998), focused on the culture of the high achieving Jewel-on-the-Hill High School (fictitious name), as well as its beliefs, values, and attitudes that shaped the behaviors in this culture. The study focused on what the researcher learned as a *participant-observer* during the planning stages of the school’s Stress Reduction Committee’s work to examine the stress problem—believed to adversely affect student health and learning. The study also considered the actions taken as the Committee implemented changes to address the problem. The school’s larger community, a suburb in a large city in New England, bounded the study.

The study attempted to answer four research questions:

(1) How did the Stress Reduction Committee analyze and name the student stress problem?

(2) What were the challenges encountered by the faculty, parent, and student members of the committee during its work on the student stress problem?
(3) What were the new learnings of the committee during its work on the student stress problem?

(4) What were the school-wide results of the planning phase of the Project?

For this chapter, the findings from data collected over a fifteen-month period have been organized according to the four research questions, beginning with common findings from the first three questions and concluding with findings unrelated to specific research questions, but nevertheless important to report. Evidence from the data to support the findings have been reported in the previous chapter.

*Common findings and researcher comment from research questions #1, 2, & 3*

- There existed consistencies as well as differences in perspectives within each subsample; the views of individual participants shared some common elements but participants also offered unique opinions on the work of the Stress Reduction Committee. There also existed consistencies as well as differences within the overall sample when data from subsamples were compared.

- The participant-observer was able to fulfill a dual role in both actively participating in Stress Reduction Committee’s work as well as being able to step back to observe how the Committee-as-a-whole was engaged in the stress initiative.

- Several themes could be identified from the data generated by the Stress Reduction Committee.
It was somewhat surprising to the researcher that these aforementioned findings were shared by the first three research questions. When it came for the Committee and participant-observer to name the stress problem, the challenges they faced, and what they learned throughout the process, the data showed consistencies and differences within subgroups (e.g. students), as well as with the study group as a whole (e.g. between students and teachers). Due to his unique role as leader of the initiative, the participant-observer was able to differentiate roles at times to be one of active participant as well as observer. Finally, for each of the first three research questions, themes such as school culture and Committee processes emerged.

Findings and researcher comment unique to research question #1

- For some participants, a fifteen-month progression of discussions and exposure to literature proved an important influence to change their perspectives on how to analyze and name the student stress problem.

- Some aspects of the participant-observer’s perspective were influenced by the fifteen-month progression of discussions and exposure to literature.

Later in this chapter, the author will mention the positive and powerful influence a fifteen-month time period provided to the research study and its participants (as buttressed by the Committee discussions and exposure to literature and data).
Findings and researcher comment unique to research question #2

- The challenges identified by the participant-observer could be sorted into general categories.
- The strains or difficulties encountered by the Stress Reduction Committee could be traced to an underlying issue or cause, as determined by the participant-observer.
- The strains or difficulties encountered by the Stress Reduction Committee could be coped with or resolved.

As previously mentioned, themes arose from the data generated by the first three research questions. The participant-observer was able to sort specific leadership challenges into general categories, such as Committee processes, his own leadership role, and communication. He was also able to trace challenges to an underlying issue or cause, which could then be coped with or resolved via a leadership response. This phenomenon proved quite helpful to the initiative.

Findings and researcher comment unique to research question #4

- Results could be categorized into specific types: Action Plans, Topic Templates, missives by the principal, etc.
- Results originated from a variety of sources, including the Stress Reduction Committee, groups or individuals associated with the initiative, and from those with no formal ties to the project.
- Results generated by the stress initiative were pervasively utilized by various individuals or groups in the school community.
- The participant-observer could gauge the importance or impact of the various results in the stress initiative.
- Results tended to be associated with a specific purpose in relation to the stress initiative.

Results generated by the Committee or others could be categorized into types and were associated with a specific purpose (e.g. an Action Plan targeting the school’s academic honesty policy). These results came from a variety of sources both within the Committee and from elsewhere, and were used by a diverse constituency in the community. Finally, the participant-observer, via a reflective mindset, could assess the impact of the results on the stress problem.

*Other findings and researcher comment independent of the research questions*

**Time**

- Events were widely and consistently distributed over time.
- The events, consistently over time, illustrated a combination of meetings and Action Plan implementation.
- Committee member participation vacillated between high and moderate levels.
- The participation of the participant-observer remained high during the entire data collection period.
- Involvement by others in the school increased after the project exited the early planning stage.

Time provided an opportunity to see the spacing and types of events (consistently distributed via a mixture of meetings and implementation efforts) and the ability to see an ebb and flow of the Committee members’ participation in the initiative. Interesting, but perhaps not surprising, was the fact that the participant-observer’s commitment to the initiative remained high throughout the data collection period. An encouraging trend was found in the increased participation of individuals not directly associated with the initiative, who showed an interest in helping improve the stress culture at the high school. The extended time of the initiative allowed the researcher to see these occurrences take place.

Opportunities for Stakeholder Involvement

- There were various ways for participants on the Committee as well as others to get involved in the project.
- The number of people involved in the project varied between small, moderate, and large.
- The amount of time and effort committed to the project varied between low, moderate, and high levels.

Because there were many opportunities for people to get involved in the initiative, in both small ways (e.g. providing a testimonial) and in larger ways (e.g. implementing an action item), the number of people involved varied substantially. An influence on this discovery came from the finding that people could commit low, moderate, or high levels of time and effort to the work, based on personal preference. There was an open invitation to members of
the school community to join in the improvement efforts, but participants retained their ability to contribute on their own terms.

Level of Assistance Given to Actions

- Results needed various levels of assistance by the SRC and by the participant-observer.
- The level of assistance provided by the SRC and by the participant-observer often differed.

The level of assistance needed to produce the results of the Committee varied depending on the task at hand. For example, if an action item would likely encounter faculty resistance (such as a homework calendar), then the work needed closer involvement from the leader. Other actions, such as the surveys, could be distributed to members of the Committee without the need for continuous guidance. These findings illustrate that leadership was distributed during the stress initiative.

III. Discussion of Findings

This section allows the researcher to report out on what importance the findings carry, particularly what larger logic can be extracted from the data. The findings in this study will likely not cause a paradigm shift, but they nevertheless produce something noteworthy to consider. Schools wishing to address student stress must commit to studying its *culture*. Although a culture study can be challenging and vexing, new learnings about a topic as nebulous as stress can be achieved. The study also exhibits one of the first attempts by a suburban high school to identify academic stress as a comprehensive school improvement target.
To appropriately discuss the findings, it should be held up to the theoretical landscape and existing research on school change and on stress, in order to discuss whether what resulted from the study was congruent or not with what researchers have theorized. As was done in chapter two, this section will be organized in three parts: leadership, the stress problem, and stress management.

Leadership

Elmore (2005) identifies school improvement as one that requires an organizational response to external demands, presenting leaders with a unique challenge to distribute leadership while emphasizing the importance of school-wide and individual agency. The structure of the Stress Reduction Committee, including its charge and the way it distributed the implementation of Action Plans, exemplified the type of organizational response Elmore calls for. (See the document titled, “SRC Charge”, in the Appendices).

Fullan (2002) adds to Elmore’s interpretation and describes deep-reaching school improvement efforts as being cultural in nature. This study examined the work of the Committee, which characterized Fullan’s five components of leading a “reculturing” effort:

- **Moral purpose**: the Committee’s overarching framework aimed to make a positive difference in the lives of its students.

- **Understanding change**: the first research question illuminated how the Committee came to a collective understanding of the stress problem.
- **Improving relationships:** the Committee’s success in its outreach efforts was hinged on its ability to forge new and positive relationships with stakeholders in the stress problem.

- **Knowledge creation and sharing:** the third research question showed the new learnings the Committee experiences as it tackled the stress problem.

- **Coherence making:** students—their learning and health—remained the central focus of the stress initiative and could be seen in both its structure and its actions.

The work of the Stress Reduction Committee was adaptive in nature and would be characterized by Heifitz (1994) as “Type III”. The stress problem was not clear and required learning (by both the Committee and the community) in order to make progress toward a solution. This was to be expected in culture work. The leader of the initiative kept attention on relevant stress issues, provided or created new information as needed, regulated levels of distress from Committee work and conflict from faculty resistance, suggested the most appropriate decision-making processes, and broke down pieces of the stress problem into less complex types. For example, during the study the participant-observer used the Topic Framework document (see Appendices) to identify cheating as a relevant issue. He provided the Committee access to both professional literature on academic integrity and internal data on cheating habits. After a lively discussion, he suggested the site-based School Council take on the task of revising the school’s Ethics Policy, so the policy would reflect the learnings and recommendations of the Committee. He then helped the School Council break the task into smaller components (e.g. an advice section written by students; a best practices section; a consequences section; etc.) and a new policy was ultimately produced.
Senge (2006) offers a framework for leading school improvement in a complex landscape such as the schoolhouse. His “systems thinking” has four components—personal mastery, mental models, shared vision, and team learning—each of which were exhibited in this study. A section later in this chapter will outline the tremendous growth the researcher experienced in his own leadership as he led both the study and the stress initiative. The participant-observer was able to nurture a creative tension that Senge describes as the juxtaposition of vision and current reality. He pushed to meet his own learning needs in order to address the challenges facing the Stress Reduction Committee. These processes and observations are illustrated in his reflective journaling instrument.

The members of the Stress Reduction Committee were able to keep in check the assumptions—what Senge calls “mental models”—that can sometimes negatively affect one’s decisions. Study participants entered the project with unique internal images of how they defined the stress problem, as exhibited in the first interviews. As the study unfolded over the fifteen-month period, participants began to allow new learnings to influence their naming of the stress problem. The final interviews show these changes and help prove that mental models were tested and then amended in the presence of new information. The stress initiative clearly benefited from this fact.

The Committee worked toward a shared vision that would address the academic stress problem, as evidenced in its results and products (research question #4) and the participant-observer’s reflective journaling. A case in point was found in the rewriting of the Committee’s charge. Early in the initiative, the group created a document that listed its purpose (to address stress) and a series of goals and beliefs about school change. Over a year
later, the Committee determined that it needed to revisit its purpose et al. because there was a feeling that the vision was neither completely shared nor evident in its actions. As a result, the group took a few months to create a more streamlined vision document, one that included a mission, vision, goals, beliefs, and messages it could carry out via its Communication Plan (see Appendices). The shared vision work created the type of commitment to long-term organizational improvement that Senge’s systemic thinking requires for lasting change.

The processes of the Stress Reduction Committee were team learning in its best form. Its meetings promoted the types of communication (discussion and dialogue) that allow groups to learn together. According to Senge (2006), team learning builds on the discipline of shared vision and occurs when a group of people align and function as a whole with a commonality of purpose. The participant-observer’s reflective journaling highlights the struggles to create efficient and effective committee processes, but it also exhibits a team that thought insightfully about complex issues and coordinated its actions through mutual trust and confidence.

Argyris (1991) points to the importance of learning from mistakes (double-loop learning) rather than acting in a way that avoids failure (single-loop learning). Examination of the work of the Stress Reduction Committee would show a bevy of mistakes; it would also show how the group learned from its failures and changed its course of action. One such example was the way it limited media access to the initiative as it unfolded. Another was the curious path the creation of a Homework Calendar took at the school. The latter example will be explained in detail at the end of this chapter.
Like Senge’s systems thinking framework, Bolman and Deal (2003) provide a structure to organize, characterize, and interpret organizational change. They do so via four frames—structural, human resource, political, and symbolic—that can be applied to the actions of the Stress Reduction Committee. Its structures were designed to meet the needs of the stress initiative: the Committee makeup, its goals, its assessments, and its actions. The leader of the initiative continually monitored these components in order to provide the best environment for improvement.

The human resource frame centers on how organizations and people shape what they do for one another (Bolman and Deal, 2003). The professional development activities delivered in November, 2007 came from the needs of the faculty. It was a good faith effort that showed the organization wanted to provide the resources for this most critical group to better understand the stress problem and the initiative’s goals.

High schools can be very political and Jewel-on-the-Hill was no exception to this rule. The leader carefully managed resistance from some faculty members, which came partly from a conflicting belief system, partly from competition for scarce resources (e.g. time), and partly from who should influence decision-making at the school. The project produced bargaining, negotiating, and jockeying for position among competing stakeholders.

The symbolic frame focuses on how people make sense of the images, actions, and symbols they see everyday (Bolman and Deal, 2003). Perhaps the most poignant example of this comes from the very existence of the Stress Reduction Committee. Its formation and steadfastness provided a validation of stress as a problem and fostered debate among all its
stakeholders. The regular meetings and actions of the Committee symbolized its importance at the school.

The school leader can act as an agent for change. Starratt (2004) believes the *ethical* leader has a responsibility to do so. His three virtues of ethical leadership—responsibility, authenticity, and presence—were evident in the actions of the participant-observer in the stress initiative. The stress initiative was formed as a response to the principal’s conversations with constituents and observations upon entering the high school. The school community relied on the principal to create a culture where new ideas could be debated, conflicts could be openly discussed, and all individuals could feel safe to be themselves. This showed responsibility toward addressing a cultural problem.

The participant-observer’s reflective journal illustrated how his interest in the stress problem grew over the course of the initiative. In a way, the stress work came to define in part who the leader was. As a result, it was an authentic task for the principal to take on. The initiative allowed him to remain close to his core values, and gave him the freedom to *be* in the culture in which he operated.

In leading the stress initiative, the participant-observer displayed an affirming presence in creating and maintaining structures, relationships, climate, expectations, and rituals that promoted the school’s beliefs and values. He acted with a critical presence when he broke down barriers to address blockages to the Committee’s work. Through an enabling presence, the participant-observer brought people together to act in partnership to make decisions or changes (Starratt, 2004). An example of this was how he distributed leadership among stakeholders.
Goleman et al. (2002) believes the degree to which a principal can motivate groups or individuals to meet improvement goals is significantly determined by the leader’s emotional intelligence (EI) quotient. The participant-observer’s actions as leader of the stress initiative fell across each of the four categories of EI competencies. A sample of activities included:

- **Self-awareness:** by keeping a reflective journal and assessing the results of his actions, as it related to his strengths and weaknesses.

- **Self-management:** by adapting to the multiple demands of being the school’s principal without losing focus or energy.

- **Social awareness:** by having the organizational awareness to detect social and power networks, and being politically astute with that knowledge.

- **Relationship management:** by generating a positive group atmosphere within the Stress Reduction Committee in order to build a productive, collective effort.

Spillane, Halverson, & Diamond (2004) view leadership as an activity, one constructed through the interaction of leaders, followers, and the particular context of a situation. The actions of the Stress Reduction Committee exhibited the four central ideas that make up Spillane et al.’s distributed leadership perspective. Setting goals represented a task that had the specific function to give the Committee something to aim toward. In paying special attention to how the Action Plans were implemented—with respect for the stakeholders’ perspectives and the pains of change—the group moved beyond viewing leadership as simply a set of tasks, but rather placed importance on how they were enacted. In the stress initiative, leadership was spread out among a broad social distribution of people: students from all grades, teachers, parents, and others not closely affiliated with the school.
This created an interdependency that resulted from the interplay between these diverse groups. Finally, the leadership activity from the Committee was dependent on the particular situation at the school, that is, the stress culture. This placed an importance on acknowledging the mutuality of the individual and the environment, and the actions of the group were influenced by the context.

Deal and Peterson (1994) provide three overlapping phases of change for the school leader. The Stress Reduction Committee spent the bulk of its effort in the first stage: planning. By clearly defining its goals from the onset, defining member roles and responsibilities, and identifying available resources, the group was able to avoid some common challenges found in this stage. Nevertheless, the Committee spent considerable time determining how best to function as a group, where to distribute leadership, and on which issues it would focus its efforts. Nearly two years into the initiative, in fact, the group rewrote its mission and vision document. The “clunkyness” experienced by the Committee in this planning stage would be considered both normal and expected by Deal and Peterson.

As the initiative unfolded, the Committee chose to enter the second stage of leading change: implementation. It took the outputs of the planning stage—i.e. Action Plans—and put them into operation. This was tricky work, because the planning stage continued. Nevertheless, the group was able to produce some results via the Action Plans. Because Deal and Peterson’s (1994) third and final stage—institutionalization—typically takes a few years to achieve, the relatively new Committee was not able to see its actions become a normal part of the school operations. That is not to say that some items, such as the Academic Integrity
Policy and changes to the course selection process, will eventually become institutionalized. It will just take time.

Fullan (2001) demonstrated that movement through the three phases is rarely linear, that an *implementation dip* is common for even successful change efforts. The stress initiative experienced this drop in performance and confidence during the midpoint of the data collection period (the winter of 2007/08). The Committee appeared to be moving in several directions and several members—particularly teachers, as evidenced in their journaling—were becoming somewhat disenfranchised from the initiative. Upon consultation with Committee members, the participant-observer slowed down some Action Plan implementations and convened the group to simplify and refocus its work. The group revisited its goals, reflected on progress, and set some short-term targets for the remainder of the school year. As a result, the initiative appeared to rebound as the 2008-09 school year began anew, with confidence, energy, and motivation restored.

Managing resistance and occasional conflict from the faculty over the stress initiative became a central task for the Committee and especially for the participant-observer (he often jokingly likened the conflict between principal and departments to the Founding Fathers’ debate over state rights and federal oversight). To some faculty, the stress initiative represented a non-academic undertaking, or worse, a potential threat to the school’s reputation for academic rigor and success. Heifitz (1994) sees conflict as a requisite of adaptive work, because values between multiple parties often compete. The participant-observer needed to manage distress so it did not get out of hand or result in personal attacks. Although personal attacks were not made directly to the leader, he suspected that several
teachers equated the stress initiative with the participant-observer himself, letting their view on his personality and what he stood for taint their view of the initiative. This needed immediate response from the leader of the initiative, otherwise he could have become a lightning rod for resistance. The participant-observer decided to refocus attention, the best he could, on the issues and not on his personality—i.e. to remove “him” from the equation. One method to achieve this aim was to enlist additional teachers (both affiliated with the Committee and not) to carry the messages of the stress initiative. For example, some teachers spoke at faculty meetings about issues; others joined the Committee in a more visible way. This tact appeared to make a difference with some teachers.

Resistance also provided the Committee with an opportunity to learn. Fullan (2001) calls for the voice of resisters to be incorporated for two reasons: (1) they sometimes provide answers or ideas that have been missed; and (2) they are crucial when it comes to the politics of implementation work. Because resisters were not marginalized in the stress initiative, but were instead listened to, the Stress Reduction Committee was able to become more empathetic toward the faculty perspective and act in a more informed way. The experience of the Homework Calendar, which will be outlined later in this chapter, exhibited this claim.

Communication is critical to school improvement efforts because it is a basic function of culture (Gay, 2000). As the stress initiative unfolded, the Committee put considerable time into developing a Communication Plan (see Appendices). The Plan contained a discussion of types, characteristics, and values of communication, as well as key questions and messages, each tailored for outreach to a particular stakeholder group. The Plan ended with a suggested list of vehicles to communicate effectively.
Dialogue and discussion became a central task of Committee meetings, although the participant-observer noted that the group was able to achieve the more simplistic discussion format more often than dialogue. This was likely due to the complex nature of dialogue, where people suspend judgment in order to produce a new flow of ideas from which all can learn and develop new meaning on the issue at hand (Isaacs, 1999). Perhaps with more practice and a longer period of time together, the Committee could reach this aim. Dialogue takes the energy among differences and channels it toward a greater common sense, so the group can access new knowledge and understandings (Isaacs, 1999).

The stress problem

Pope’s (2001) research on academic stress continues to be the gold standard for middle and high schools examining manifestations of a school stress problem. Jewel-on-the-Hill’s own student survey results, from the winter of 2008, replicate several conclusions made by Pope’s Stanford team of researchers (Jewel-on-the-Hill Stress Survey, 2008). Most notably, 80 percent of the school’s students reported academic stress as a “moderate” to “severe” stressor in their lives (others reported less, yet significant, stressors including parent expectations, relationships with friends, and self-inflicted stress). Other alarming statistics included:

- 89 percent of students reported sleeping less than the recommended nine hours nightly.
- Only two-thirds of students reported getting grades of A’s, or A’s and B’s, while nearly 90 percent of students believed their parents expected them to get these grades.

- Two-thirds of students reported “moderate” to “frequent” use of personal technology to communicate with friends while doing homework.

- One-half of students reported spending nine or more hours weekly doing extra-curricular school-related activities.

- 77 percent of students reported feeling overwhelmed by their schoolwork (fortunately, 62 percent of the students felt they had “moderate” to “high” control over their stress).

The Stress Reduction Committee, because its adaptive work required learning “on the fly” as it acted to address the stress problem, chose specific issues to both educate itself and the community. At Committee meetings, it worked through four Topic Frameworks: sleep, free time, homework, and academic dishonesty. Action Plans resulted from these discussions and eventually, so did results from the implementation of the Plans.

In communicating with the various stakeholders, the Committee used a more diverse range of topics for its palette. At parent and student assemblies, it drew advice from research and popular literature to speak about college admissions, over-scheduling (i.e. achieving balance), sleep, peer support, rigor, social and emotional competencies, resilience, and the importance of empathy. At the full-day November, 2007 professional development workshop for faculty, the focus turned to chronic stress’ affect on learning, sleep, academic honesty, teacher stress, Committee goals and beliefs, and a general overview of the science of stress.
While the naming of the stress problem and its manifestations in Jewel-on-the-Hill’s setting were consistent with Pope’s research, the Stress Reduction Committee was able to tailor its learning activities to the group’s needs. It was also able to customize its communication so it would better resonate with the particular stakeholder.

Stress management & coping strategies

The Stress Reduction Committee chose to spend considerable time educating its stakeholders on the stress problem and how to use psychological and physiological coping strategies to manage the stress response.

In revisiting Greenberg’s (2008) stress model, interventions were suggested to the stakeholders at each stage.

For example:

- **Life situation**: stakeholders were advised to accept this beginning point as unavoidable (i.e. there will always be stressful situations in our lives).

- **Perceived as stressful**: Dweck’s (2006) growth mindset was promoted, as well as attempts to boost students’ self-efficacy by pointing out the numerous times in
which they handled stressful experiences successfully. Also, students were encouraged to embrace their peer and adult relationships.

- **Emotional arousal:** a locus control was emphasized for students. The creation of the PowerSchool contract was an example of promoting this management technique, as was the revisions to the course selection process (see Appendices).

- **Physiological arousal:** the school delivered mindfulness-based strategies and breathing exercises to generate the *relaxation response* for many of the school’s students and faculty through its partnership with the Benson-Henry Institute for Mind-Body Medicine.

- **(Physical and Mental) Consequences:** when students reached their breaking points, to where they were unable to function in school, the school worked closely with medical professionals to support a student’s leave of absence. When students are in this serious position, there is no remedy other than removal from the environment (which some students chose) (Greenberg, 2008).

The Stress Reduction Committee’s response to stress coping and management could be viewed through Ginsburg’s (2006) 7 *Cs of resilience*—interrelated components that can be cultivated to improve one’s ability to bounce back from adversity or stress:

- **Competence:** the ability to handle situations effectively, gained through actual experience. Self-efficacy concepts were promoted through various activities and dialogue.

- **Confidence:** a solid belief in one’s own abilities, rooted in competence. The school would remind students that they have achieved a considerable amount in
making it to high school and that they have proven they can handle the additional rigors of high school that would surely come.

- **Connection**: close ties to family, friends, school, and community. The school’s advisory program was strengthened over the course of the study (by a different committee). In addition, adult-student relationships were discussed and promoted via a culture initiative.

- **Character**: a fundamental sense of right and wrong that forms the basis for decision making. Work to revise the school’s Academic Integrity Policy exhibited this concept.

- **Contribution**: understanding the importance of a sense of purpose to one’s life. The school employed and continued to support a sixty-hour community service graduation requirement. It also created two international, service-based experiences that many students participated in.

- **Coping**: employing specific strategies to cope with stress. The Benson-Henry Institute partnership as well as the inclusion of yoga as a mandatory unit in Wellness courses fostered this trait.

- **Control**: an internal drive to make decisions and take actions to manage one’s life. As previously mentioned, the creation of the PowerSchool contract was an example of promoting this resiliency trait, as were the revisions to the course selection process (see Appendices).

While the bulk of the Stress Reduction Committee’s intervention efforts were turned toward the three primary stakeholders, the group itself employed coping mechanisms to
manage the “pains” of school change work it engaged in. The group paced itself, canceling meetings if no items were urgent or if it was a particularly hectic time of the month. It tackled issues that its members believed it could make a difference with or impact on, being mindful of its own locus of control. As the relationships became stronger among Committee members, participants became more assertive in meetings. As the Committee gained traction and credibility within the school community, the group as an entity became more assertive in its communications. Finally, the Committee routinely practiced the types of meditation and breathing exercises it was promoting to the school community. This served as both a way to model and speak about these techniques in an informed way, but also a way to relieve the stress of the day and begin the meeting in a “good place”.

IV. Limitations to the Study

The reader should be mindful of the limitations and biases inherent in his study. Reliability and validity are two concepts that get to the quality of the research study and whether its results can be believable, are accurate, and can be reasonably applied to similar settings (Miles and Huberman, 1994).

Reliability addresses whether the research processes used were consistent and stable over the time period of the study. Several strategies, as suggested by Miles and Huberman (1994), were used by the researcher to increase the reliability of this study. These include, but are not limited to:

- Aligning the research questions with the design of the study.
Collecting data across the full time period of the study as well as from each of the study’s participants.

Clearly describing the researcher’s role and status within the study.

Two distinct types of validity were relevant in this qualitative study: internal validity and external validity. Internal validity measures how truthful the findings of the study are to its participants and its readers, and was controlled in this study by the following sampling of strategies (Miles and Huberman, 1994):

- Writing about the account in a comprehensive way.
- Using triangulation of the data sources to create converging conclusions.
- Identifying areas of uncertainty.

External validity speaks to whether readers can transfer any of the study’s conclusions or findings to other contexts (Miles and Huberman, 1994). Firestone (1993) identifies three levels of external validity (sometimes referred to as generalization): from sample to population, analytic, and case-to-case transfer. Given that this study was bounded to a particular type of high school (college prep) and distinct age and socioeconomic characteristics, only a case-to-case transfer seems feasible. The reader should refer to the “Implications for Further Research” section of this chapter for suggestions to enhance the study’s external validity.

The degree to which limitations and biases inherent in the study have been effectively controlled and addressed helps increase validity. The researcher stayed mindful of the following potential biases throughout the study:
- *Researcher:* had perhaps the greatest influence on this study because of the researcher’s role as participant-observer, leader of the Stress Reduction Committee, and principal of the school. To control for the potential threat to internal validity via researcher bias, the participant-observer used triangulation of data sources as his chief data analysis methodology. In addition, the researcher was continuously mindful of the way he interpreted the data he collected. Furthermore, he checked these interpretations with the participants who checked them for accuracy.

- *Single site and unique site:* can affect the researcher’s ability to generalize the results of the study to other contexts (external validity). Considering the distinct characteristics of this study’s setting, outside readers must use caution when trying to apply its findings to broader contexts or demographics. Also, this study did not address all the types of stress affecting students, but instead focused its examination on the academic stressors the Committee deemed most worthy and feasible to study, taking into account Jewel-on-the-Hill’s context (and not on social stressors, for example).

- *Sample size:* could threaten the study’s external validity, in that it may not produce the breadth and depth of data the researcher hopes for. In carefully and purposively selecting participants who had diverse characteristics and backgrounds, the researcher attempted to limit this bias without expanding the size of the sample to unmanageable proportions (Consalvo, 2007).
- *Instrumentation:* produced by qualitative studies because the researcher makes changes to the data collection instruments as the study unfolds. This is natural and desirable. In this study, the researcher sometimes needed to push the participants to elaborate in their journal or interview responses to gain richer and more useful data, particularly with the last interview instrument. In addition, the researcher needed the flexibility to ask follow-up questions to provide better data. These approaches are considered acceptable to the qualitative researcher and should have had little impact on the quality of this study’s findings (Consalvo, 2007).

- *Time:* progress in school initiatives typically unfolds in a nonlinear and clunky fashion. This study was no exception to this rule. It was bound not only in the characteristics of its samples but also in the time period utilized to collect data. While these factors are potentially limiting, a period of fifteen months was used to collect data, which should have had a minor effect on the study’s validity (Consalvo, 2007).

Given the limitations and potential biases on this study, the reader must carefully guard the findings around these reservations when considering the implications for practice, further research, and leadership lessons that form the rest of this chapter.

V. Implications for Practice


- Samuel Beckett
A very popular error: Having the courage of one’s convictions; rather, it is a matter of having the courage for an attack on one’s own convictions.

- Friederich Nietzsche

This section of the chapter will address the “so what?” question, that is, why did the researcher conduct this study in the first place? The answer is that the researcher believed he had an ethical responsibility to address the stress culture at Jewel-on-the-Hill High School, both because of the conversations he had with concerned parents and teachers, and because of the students he witnessed struggling to keep their heads above water. As he delved deeper into the problem, his interest piqued and his resolve strengthened. The researcher hopes that the advice provided in this section may benefit other practitioners in the field of leadership as well as parents and students, so that the profession and educational experience may be improved through what he has learned. The implications have been organized in three sections: for practitioners, for students, and for parents.

Before launching into the advice, there is one implication from this study that provides an overarching approach or drive to the work: create discussion and dialogue throughout the school community. Research and popular literature can offer sound advice on how to address school stress. However, the contextual and individualized nature of the stress culture lends itself best for solutions that come from within. The school leader can provide stakeholders the opportunity to explore questions, test remedies, and collectively come to a new understanding of the problem. In doing so, one may experience (as happened in this case) that a cathartic feeling takes hold because a barrier that has prevented voice has been lifted. People talk about their relationship with stress and develop ownership on how the school may address it. The leader has given the school community permission to talk about
the “elephant in the room” and the validation to believe, “We could do better than this.” and “This price [for performance] is too high to pay.” Dialogue provides the impetus for driving school improvement forward.

For practitioners

This culture study has been conducted through the lens of a school principal and implications for school leadership come directly from the findings. Five areas have been identified for consideration for school leaders: committee, students, parents, faculty, media. (The list in this first section offers a sample of implications for the school leader. For a more extensive list of advice in how to start this work via a committee, the reader should see the Appendix D document titled, “Starting a Group to Address Student Stress”. Additional advice can be found in the Participant-Observer’s Perspective and Theme-Ordered Conceptual Matrix tables found in chapter four.)

- Committee (emphasis on processes and implementation)
  
  o Focus committee work on school culture. The group first needs to examine the effects school culture has on student stress. The SRC chose to do this through collecting testimonials and also through formal surveying (two rounds of surveys over a three year period). Culture can be viewed as a series of behaviors. When the committee understands the culture at play, it can educate stakeholders, model behaviors, and work to change the culture through specific actions.
- *A committee may be best served by acting in a steering capacity.* It can provide direction to the school improvement work, but it cannot take on the entirety of the planning and implementation by itself. This is because of the complex and grand scale of school culture initiatives. As a result, culture initiatives require leadership to be *distributed* among the school community.

- *A person or persons on the committee should carry “balcony” responsibilities,* meaning someone occasionally steps back from the initiative to reflect, observe, and assess the decisions of the group and the impact of its work. It makes the most sense for this person to be the committee leader, but it is possible someone else in the group could fill this role. It may also prove helpful to get this type of feedback from credible and politically strategic sources outside of the committee, such as the district superintendent or veteran faculty members.

- *The leader should provide consistent assistance to help the committee generate products and results.* While some implementation tasks can be delegated, and not all ideas need to come directly from the leader, the person chairing the committee should take ownership on seeing that the planning results in fruitful outcomes. In some cases, it may be appropriate to delegate this responsibility, but someone needs to take ownership on each action item. The Stress Reduction Committee assigned this responsibility to a member or members at the time each Action Plan was created.
Involvement in culture initiatives should be pervasive, when possible. The leader should embrace new participants who show interest in the work and keep the invitation to join the school improvement effort open—whether it be for a smaller or larger role.

Gather as many perspectives and testimonials as feasible, particularly the voice of students; share and discuss these perspectives with committee members. This quest will help participants gain a broad understanding of the complex stress problem. Empathy is a highly desired characteristic in stress culture work.

Time is an ally to culture work. Do not rush toward a simple response or into actions that might generate heated resistance. Doing so may compromise the initiative’s success. Allow for a slow momentum to build, for understandings to develop, and for new allies to join the work. In doing so, the committee can both learn and lead the school culture toward improvement, keeping in mind Heifitz’s (1994) lessons on adaptive change. When starting the culture work, more straightforward, technical tasks should be the committee’s focus (e.g. setting up committee processes, conducting a survey, writing to stakeholders, collecting testimonials, building alliances, etc.).

Focus the committee’s efforts on the themes that arise. For example, finding the best way to communicate with its stakeholders became a central task for the Stress Reduction Committee. Focusing on themes allows the committee to target its actions in a thoughtful and useful way. In culture work, it is likely
themes will develop for how the problem is named, the challenges a committee will face, and the new learnings it will produce. This phenomenon allows the leader to break the initiative into more manageable chunks.

- **Students** (emphasis on voice)
  
  o *Listen to them.* It gets no simpler than this. Students not only have a unique view of the problem, but they carry the most important perspective. In this study, the researcher found that students provided specific and useful advice (e.g. eradicating busywork in homework). In an illuminating moment for the Stress Reduction Committee, the student members spoke of their desire to share characteristics of their teachers who lessen their school stress (i.e. “stress-friendly). These teachers were not ones who lessened workload or lowered standards. Rather, the teachers were high-challenge, yet flexible, reasonable, and developed positive relationships with their students. In fact, the teachers who were most stress-friendly were not necessarily the ones who gave the highest grades to these students.

  o *Actively engage students in the school improvement process.* There are many opportunities to involve students in an active way, whether through committee participation or by simply giving them a chance to express their opinions. To the extent that students can actively steer or contribute to the formation of an action, the leader may find the initiative’s effectiveness increase.

- **Parents** (emphasis on “buy-in” and establishing a home-school partnership)
o Establish parents as partners in the school improvement work. Suburban communities tend to have an active parent base. Turn this fact into a benefit by actively including parents on committee work, on action plan implementation, or by simply asking their opinion on the stress problem. Parents can be quite astute on this issue, having brooded over it for many years (or even experienced it themselves).

o Communicate with parents. The majority of parents do not want to hover around the school. All parents, however, crave information about how they can best support their children. The Stress Reduction Committee frequently used the school’s e-mail listserve and mailings to communicate its work and messages. The creation of the website was an effective vehicle for this. The SRC received very positive feedback on the assemblies it held at the start and during the year. There are many vehicles that school can use to effectively communicate with parents (see Communication Plan in the Appendixes).

o Validate the difficult position parents are in. By the time students have reached high school, they are nearing the end of the road as far as what their community has to offer them in the classroom. Most parents rightly view college admissions as a rite of passage into early adulthood—if their children get into a good school, they have done their job. In speaking with many parents during this study, the researcher was surprised to hear a significant number of parents who recognized the health consequences of school stress (i.e. lack of sleep, sickness, unhappiness), wanted to act on it, but did not want
to rock the boat so close to graduation. The parents knew their child was suffering, and it tormented them. In helping parents come to terms with school stress, and to partner in remedies, the school leader must empathize with this difficult position parents find themselves.

- Actively help parents navigate the college admissions process. Whether through parent forums, guest speakers, or individual meetings, help parents make sense of a very anxiety-producing process. Form a home-school partnership with the goal being to find the best college fit for each child.

- Faculty (emphasis on generating “buy-in” and promoting good teaching practices)
  - Clearly communicate values, beliefs, and goals of the stress initiative. School improvement work can offer a threat to many teachers, particularly in high achieving schools where performance-based success is coveted (and expected) by the community. The leader can frame the initiative as one of improvement, where what is working will be preserved, and areas that are not working will be targeted for improvement. Be explicit of the desire to preserve the good reputation of the school. Much of the faculty resistance to the Stress Reduction Committee’s work was due to a misunderstanding of its values, goals, and beliefs. Ironically, the faculty’s established values and the initiative’s beliefs were quite in sync. Communication was the problem.
  - Focus on the manifestation of the stress problem via a learning tact. Many faculty at Jewel-on-the-Hill High School were concerned and compassionate about student mental and physical health problems. However, when the
Committee started putting more emphasis on the learning implications of chronic stress, the problem appeared to resonate more with faculty. Teachers put a tremendous amount of time and effort into designing good lessons, delivering them, and then assessing what was learned. If chronic stress robs students of adequate sleep, orients them toward a bottom-line grade, fosters cheating, and diminishes memory, teachers will likely show significant concern and see a greater need to address the problem.

- **Validate teacher stress.** In suburban communities, where expectations for students are high, so are expectations on teachers. In most states, teachers are faced with the added pressures from standardized high stakes exams in math, English, science, and social studies, as well as the intense curriculum coming from the College Board for Advanced Placement courses. While merit pay schemes have not gained traction in most schools (i.e. linking teacher pay to student performance), the concept looms large and can exert pressure on teachers. Once the Stress Reduction Committee validated teacher stress via a professional development workshop (and follow-up wellness opportunities), the faculty appeared more willing to speak about student stress.

- **Recognized the pains of school change.** As outlined in the second chapter of this dissertation, school change is neither easy nor painless. All participants give up something, whether it is their comfortable routines, or something else that is coveted (e.g. a specific program or their standing on the faculty). The
leader should be open about the difficulty of transitioning and be cognizant of
the temperature of the faculty around the change.

- Engage those who resist. It may be tempting to marginalize those who offer
resistance toward school improvement work. However, in doing so, the leader
loses a valuable voice (and opportunity to learn from different perspectives)
and also increases the likelihood the person(s) will engage in sabotage to
protect the status quo.

- Provide as many “credible” faces to the initiative as feasible. In doing so, it
reduces the likelihood that resistance will focus on the person (and
personality) leading the change. The leader wants to focus attention on the
issues, not the people.

- Include social and emotional skill development in the definition of a
“teacher”. Expand the roles and responsibilities of teachers to include
teaching the skills necessary to produce well-rounded students. High school
teaching should not be exclusively in the academic realm, but include the
opportunity for students to integrate academic learning with their real world
lives (Starratt, 2009).

- Promote standards-based education. A JHS parent (and a National Public
Radio show host) once said, “When winning is so profitable, then cheating
becomes worth the risk.” A standards-based education approach is not only
what is best for student learning, it reduces the emphasis on grading and the
impact of single grades. Instead, a more holistic focus is placed on what
students know and are able to do, and a determination is made on what degree they have met a particular standard (rather than performance on a particular exam).

- **Promote “right-brain” thinking.** Pink (2005) demonstrates the importance of developing the skills of design, story, symphony, empathy, play, and meaning (all senses that function in the right hemisphere of the brain) for the 21st century graduate. Traditional school curriculum and instruction fall short in promoting both right- and left-brain development, or do so only through enrichment activities outside of the core curriculum.

- **Media (emphasis on management of)**

  - Abraham Lincoln said, “The hen is the wisest of all the animal creation because she never cackles until after the egg has been laid.” The participant-observer in this study found the media his best friend and worst enemy in regard to the success of the stress initiative. There was a tension in which using the media could (and did) spread the values and beliefs of the stress work beyond the school community (nationally, in fact) so that others could take up the important work. However, excessive media attention can alienate the initiative in the minds of faculty. Faculty put themselves on the line during change initiatives. They likely do not want to read about this in the newspapers. The leader must come to terms with this tension. When the participant-observer believed the media attention (there were often weekly requests) was hurting faculty buy-in, he essentially cut the media off and re-
established the initiative as an internal one. He chose instead to spread the values and beliefs of the work through professional conferences and contacts.

For students

Learnings from this study, other research and popular literature, as well as common sense, can offer students advice to improve their relationship with stress:

- Locus of control. The Stress Reduction Committee kept the centrality of the student its focus for the entirety of the stress initiative. It did this in part because it believed that students who experienced debilitating stress perceived a lack of control over their situation. As a result, the Committee promoted the concept of a locus of control for students through parent and teacher education as well as its partnership with the Benson-Henry Institute, and other student-centered actions.

- Define success. When “success” is not defined by students themselves, then it is left up to the culture to define it for them. This carries with it both the positive and negative aspects of the performance-based culture. In addition, students who react to chronic stress or peer competition by becoming more perfectionistic may alter their definition of success to unrealistic and unhealthy terms. Students need to define success early and do so based on personal interests and goals (Stanford’s Challenge Success Initiative Website, 2008).

- Actively cope. Just as one may exercise to cope with weight gain, or study to cope with anxiety over a test, students can employ a bevy of proven strategies to manage and reduce stress symptoms. The key is to find healthy strategies that
work best for the individual (e.g. running, art, meditation). It is an active process that will also enhance the student’s locus of control.

- **Tap into peer supports.** While peer competition can be intense in high achieving schools, friends and acquaintances can also provide substantial stress relief. It is likely other people are going through the same pains of stress as the student. Because the student perspective is the one that is most useful in fighting stress, positive peer relationships can often provide the best support. Competition and cooperation can become “co-opetition”, a popular concept in the business world. Co-opetition validates both competition and cooperation, and melds them together to best benefit those involved through forming partnerships (*The Economist*, July 5, 2008).

- **Choose college for fit.** A dirty little secret of college admissions is the significant portion of students who transfer schools within two years of leaving high school. A recent U.S. Department of Education study reported as many as 60 percent of college students attend more than one school before they complete their undergraduate degree (National Center for Education Statistics, 2005). The reasons for this vary, including financial reasons and students moving to more prestigious institutions. Another reason is that students have chosen their schools poorly, based more on reputation than on what institution will provide the student with the best opportunity to pursue self-interests and to be themselves (Mayher, 1998). Not only is tuition money on the line, but so is happiness (the latter being most important).
- **Sleep.** Chronic sleep debt can be disastrous for adolescents—who need on average 9 1/2 hours nightly—both from learning and health standpoints (Black, 2000). A student member on the Stress Reduction Committee, and self-described perfectionist, once took a challenge from the group: study two hours less for his next exam and substitute it instead with sleep. He took the challenge and reported back that he felt the added sleep *boosted* his performance on the test. It was an epiphany for him and possibly life-changing (he went on to hone this technique at Yale University).

- **Find balance.** Finding balance in the decisions one makes in life is a critical and life-long pursuit. There are many unpleasant tasks that students needs to complete in high school, but there are also many decisions that can be made on *interest,* such as which activities to participate in, and how to spend “down-time” (do not eliminate this from daily life). Excess of any one thing (including non-stop studying) can be harmful—Shakespeare was writing about this way back in the year 1600 in *As You Like It.*

*For parents*

Parents are partners and important stakeholders in addressing school stress. A principal colleague at a neighboring high school referred to stress in affluent communities as a “self-inflicted wound, where anxious parents produce anxious students.” He spoke to the stress capital—that is coveted among some students and parents—as a possession and
something to wear as a badge of honor. To combat this troubling concept, the following advice can be provided to parents:

- **Rely on good parenting.** The Stress Reduction Committee often boosted parent morale at assemblies and meetings by complimenting them on getting their young adults to high school in good shape, that their children were thriving in the classroom (albeit perhaps not all in a healthy way) because they have been doing their jobs well. The group also called for parents to rely on the plethora of advice on “good parenting” for adolescents. The conversation framed high school as a four-year progression of increasing student space (figuratively), responsibility, and control. If this was accomplished, their children would likely flourish in college as independent and self-directed adults. Taking this stance may mean parents should *not* rescue their children when uniforms and school work are forgotten at home.

- **Hold schools accountable.** Schools are a reflection of the values of its community. When parents come together in a collective voice, and exercise their civic right, schools can change for the better. Trusting schools to do right by their children is essential to student achievement, but parents must also hold schools accountable to address problems. Doing so is an ethical task rooted in responsibility.

- **Open dialogue with peers.** The participant-observer often marveled at parental exchanges during stress discussions in which parents shared experiences about their children’s struggle with stress and also on how they successfully addressed the problem. As these exchanges took place, one could feel a burden being lifted,
or at least validated. Just as students can often provide the best stress relief to other students, parents can experience the same phenomenon with their peers.

- **Start early and take a long view.** For some, school stress can start in the elementary years. Parents can begin coaching their children to make healthy decisions (e.g. balance) once stress appears, regardless of their grade. It may also prove helpful to think of schooling as a thirteen-year progression, beginning in kindergarten and extending to high school graduation, one that will have ups and downs, triumphs and failures, and a whole lot of awkwardness, in an otherwise, normal school experience.

- **Define success with your child.** Students are encouraged to develop a personal and realistic definition of success. Creating this definition as a family unit makes the task more meaningful for all. Doing so can also guide parents into deciding the type of support best suited for their child’s aspirations (Stanford’s Challenge Success Initiative Website, 2008).

- **Game plan failures.** As the adage goes, “nothing risked, nothing gained.” Risk also brings occasional failure. Parents who develop strategies with their children for when things do not go well will likely find a silver lining in the negative experience, that is, that failure can result in learning and growth. This task is best done at the start of each school year. (Stanford’s Challenge Success Initiative Website, 2008)

- **Choose college for fit.** Parents should coach their children into finding a college best suited for their children’s personal interests and aspirations, not because of
the reputation, the fact that they attended that school, or because the campus
represents a nice place to visit (Mayher, 1998).

- **Model.** Children notice how their parents cope with stress (they “major” in
studying their parents). When parents cope with stress in a negative way (e.g. a
bottle of Merlot), children are more likely to do the same. Positive techniques that
work for parents should be shared with their children.

- **Break the cycle.** When the work of the Stress Reduction Committee was featured
as a front-page story in a national newspaper, the participant-observer was
flooded with testimonials, many of which came from adults in their twenties.
They spoke of a negative relationship with stress that started in high school,
carried into undergraduate and then graduate school, and even into the workplace.
At varying points in their lives, they were able to break the unhealthy bond and
better manage their stress (often through a better locus of control and more
holistic perspective). The message here is that it is never too late for parents to
help their children with stress.

- **Choose holistic growth over sheer performance.** Many parents in the Jewel-on-
the-Hill community had children who assumed their parents valued high grades
and SAT performance as the most important indicators of high school success and
parental acceptance. This perception can have devastating effects on the growth of
adolescents (Dweck, 2006). Thankfully, parent surveys showed that the vast
majority of parents wanted their children to achieve in the classroom, but also be
healthy and happy. Parents should value the social and emotional competencies
that remain critical for success in the workplace (i.e. self-actualization, problem solving with diverse constituencies, and managing conflicts).

- *Establish and monitor a productive environment for homework.* Personal technologies have made the environment in which students complete homework more complex and difficult to manage. Parents can help their children manage disruptions from technologies by setting limits on use (e.g. not allowing technology while studying or doing cognitively demanding tasks, but instead providing “natural breaks” in which students can use the devices.).

This study did not focus on elementary-age students, but it can nevertheless offer three suggestions for leadership at this early developmental stage: (1) make social and emotional learning central to the curriculum; (2) de-emphasize grades and help students and parents develop a healthy relationship with numerical assessments; and (3) partner with parents on approaches to help children meet challenges and cope with stress.

VI. Implications for Further Research

In considering the limitations and potential for biases to the study, the researcher can recommend areas for further research. This section will be organized in two parts: suggestions to increase validity, and topics needing further study in a school context.

**Validity**

To increase validity, studies should be replicated in the following ways with specific biases in mind:
- **Researcher bias:** studies in which the roles and responsibilities of the researcher are different. For example, what findings would result if the participant-observer was not the principal of the school, but rather a different administrator or a teacher?

- **Single and unique site biases:** Jewel-on-the-Hill’s suburban context for this study is relatively narrow when considering all the different domestic and international types of schools. This study could be replicated in urban and rural environments, at earlier developmental ages (e.g. middle schools), at independent or parochial schools, and at international or American schools overseas.

- **Sample size bias:** studies where the whole sample and subsample sizes are larger as well as more diverse in its makeup. This study used eight participants and divided them into three subsamples: parents, teachers, students.

- **Instrumentation bias:** studies in which a broader range of instruments were used that also had a greater number of questions. The researcher can always strengthen instruments such as interviewing, journaling, etc., by strengthening the quality of the questions. A greater array of instruments provides a better chance that the researcher can achieve triangulation with his or her findings.

- **Time bias:** studies that lengthen the data collection period. While this study collected data over fifteen months, additional results from the stress initiative emerged as the work continued (i.e. the study provided a window into a longer-term improvement initiative). It is conceivable that a longer data collection period could produce additional findings.
Further study topics

This study answered four specific research questions, tailored to a Committee’s work on academic stress. Additional research questions could be generated around specific topics commonly linked to academic stress:

- **College readiness:** are schools best preparing its graduates for the rigor and ever-changing context of higher education?

- **Sleep:** it is the author’s opinion that chronic sleep debt or deprivation is a greater influence on adolescent learning, health, and development than has been previously granted. Can sleep issues be better linked to school achievement?

- **Personal technologies:** cell phones, social networking sites, and other personal technologies are pervasive among this generation of youth. What influence does its use have on school achievement and adolescent health?

- **Extrinsic motivational structures:** today’s high schools are predominantly structured around grades, awards, rewards, grade point average distribution charts, and other ways that separate students into silos. How do these extrinsic structures influence motivation in high achieving and highly competitive suburban cultures? Does this lead to learning, or just performance.

- **Health consequences:** to the lay practitioners, this generation of adolescents appears to have a greater number of minor to serious health problems than recent generations. Is stress the culprit?

- **Perfectionism:** the literature illustrates how high stress cultures can encourage perfectionist tendencies among the general population. However, the bulk of the
research on perfectionism occurs with those clinically diagnosed as “gifted and talented”. What effects on achievement and health can be attributed to perfectionism in a school stress culture?

- **Mind/body approaches:** Jewel-on-the-Hill High School partnered with a mind/body institute to provide a series of stress management workshops to its students. The school was able to fund the arrangement by allowing the institute to conduct a research study on the effectiveness of the techniques on increasing self-esteem and locus of control, among other things. Mind-body approaches to actively cope with stress symptoms presents a promising area for further research, as does other coping mechanisms outlined in chapter two of this dissertation.

- **Adolescent happiness:** the vast majority of parents want their children to be happy, but the stress culture often compromises happiness and creates a conflict in values. What role should happiness play in adolescent development? Does increased happiness lead to higher achievement (i.e. “happy cows produce more milk”)? Should happiness be compromised in the pursuit of performance goals (e.g. getting into a name-brand college)? Should satisfaction gained from civic participation and selfless service be eschewed in favor of performance?

- **Social and emotional learning:** elementary and middle schools generally place a high value on social and emotional competencies. The traditional high school model pushes these skills to the fringe in the name of “academic or scholarly” development. Should social and emotional learning be just as important in the high school curriculum as reading, writing, and arithmetic? Do students higher on
the social and emotional competency scale show more resiliency, or happiness, or achievement, or better health?

Finally, stressors outside of the academic realm should receive additional study, as they relate to the school context. These include social stressors (e.g. peers, parents, friends), physical stressors (e.g. handicaps), learning disability stressors (e.g. executive functioning disorder), and economic stressors (e.g. financial hardship). We must resist the urge to create a “one size fits all” response to school stress and must first develop a deep understanding of which stressors are applicable to one’s particular school context.

VII. Implications on the Participant-Observer’s Leadership

The work of the Stress Reduction Committee promoted the value of taking on a challenging problem in a collaborative way, learning from its mistakes, and growing as individuals, all the while contributing positively to school culture. The study of this work provided a growth experience for the participant-observer. The stress initiative represented the most challenging, yet engaging and transformative leadership experience he had ever experienced as a school leader. The experience was a testament to the value of having the principal delve deeply into school culture and lead the school community through a formal school improvement exercise. The reward to the participant-observer was to see progress toward addressing the stress problem as well as see his leadership capacity and skillset grow as a result of taking on an issue that was important to both the school and to him. Principals sometimes spend the bulk of their time taking on “nuts and bolts” or management issues and then delegate the teaching and learning agenda to others. This abdication of an educational
leadership role is neither good for the school nor good for the leader’s soul. The stress initiative allowed the participant-observer to break from this tradition—which he experienced often—and fully engage in leading a teaching and learning agenda. In doing so, tremendous personal growth resulted.

This section, which precedes the conclusion of the chapter, will highlight the leadership lessons gathered by the researcher through this study. It will answer how his leadership evolved over the course of the study and an analysis will take place through each of the four research questions and other findings. The section will conclude with a mini-case study analysis of the curious path of the school’s Homework Calendar. The participant-observer’s newly-developed leadership creed will be offered.

The naming of the stress problem

As the Committee debated and discussed how to name the stress problem (e.g. Was it cultural? What topics were relevant? etc.), the participant-observer did more listening than speaking. The exercise validated and strengthened his belief in the power of learning through listening. Putting his assumptions (or mental models) aside, he was able to broaden his understanding of the stress problem by hearing the unique perspectives of the Committee members and others. This method would likely prove most useful when an issue is complex, undefined, or would benefit from empathy for the perspectives of others.

Through listening closely to what participants in the initiative had to say, the Committee was able to tailor the naming of the stress problem to the specific stakeholder groups. For example, negative effects of chronic stress on learning resonated more with faculty than with parents and students (where health concerns were of greater interest). The
strategy proved effective in convincing people that the stress initiative was a worthy endeavor. The participant-observer became more convinced of the power of listening and understanding other perspectives before acting.

The stress initiative cast a wide net to identify relevant topics; it then narrowed its focus on specific pieces of the stress problem. In doing so, the Committee could go into depth on issues that it felt it could make an impact on (academic honesty, for example). This appeared to be a useful approach when taking on cultural issues, which tend to be nebulous and complex in nature.

The school’s naming of and response to the stress problem happened over the course of three years (and continued as this dissertation was written). As the findings suggest, the leader observed a benefit in allowing time to exert a positive influence on the efforts. As time unfolded, the naming of the stress problem and the purpose and vision of the Committee gained clarity. Returning to how best respond to adaptive challenges, where learning must take place, the leader would benefit in giving enough time for participants to make sense and find meaning in the work.

The coursework supporting this study promoted the idea that the naming of values, beliefs, purpose, and vision was paramount to school improvement efforts. The participant-observer chose to apply this concept to the stress initiative by defining these items through the revised Charge document (see Appendices)—the Committee decided to revise the mission and vision in order to simplify the message and the focus of the work. The value of this task became evident to the leader as he used the document to ground the debate and guide the actions of the group.
Finally, the coursework exposed the researcher to extensive literature on school culture. Through the stress initiative, the participant-observer was able to see the pervasive influence “reculturing” work could have on school improvement. In fact, he came to believe that the greatest influence on teaching and learning was through culture work. Although culture work at Jewel-on-the-Hill High School seemed glacial in pace, it provided the leader a feeling that the effort would have meaning and also a lasting impact on the lives of young people.

*The challenges the Committee faced*

As one might have expected through school improvement work that addressed parts of the school culture that were detrimental to teaching and learning, there were considerable challenges for the Committee and the leader to overcome. The leader, with the support of the Committee, faced each challenge head-on and with humility. Regardless of whether a teacher’s resistance might be fair or not, it behooved the leader to accept the challenge and find ways to overcome it. In his career in leadership, the participant-observer might tackle some challenges and ignore others. Through the stress initiative, the researcher has come to believe that challenges that create direct barriers to school improvement work must be addressed in a non-defensive and inclusive way. Otherwise, school improvement is compromised.

The participant-observer benefited from taking Heifitz’s (1994) suggestion to break down challenges into adaptive and technical components. This had a simplifying effect on the work. For example, the Committee determined that students would benefit from seeing a more comprehensive view of their decisions during course selection time (i.e. the totality of
their course and extra-curricular decisions). In breaking the issue down, there was a technical piece (where in the process the school might help students gain this view—accomplished by having students fill out a time management worksheet) and an adaptive piece (a change in mindset was needed so students could see that individual course decisions had broad implications on other aspects of their lives, such as time with friends or other extracurricular activities—accomplished through discussions with counselors and at class assemblies). This approach also made the challenges less daunting to the Committee.

Early into the stress initiative, the leader realized that the effort was a marathon rather than a sprint. As a result, it required persistence in overcoming challenges (which could reappear at any time) and patience with those who just didn’t seem to understand or accept that stress was a problem for some students. Being persistent allowed the leader to “keep up the heat” (as Heifitz and Linskey (2002) demand) on moving the work forward, while being patient allowed time and discussion to exert a positive influence. Never before had the participant-observer been as persistent and patient over such a long period of time on a single initiative. In doing so, he was able to see the value in these leadership attributes.

Some challenges in the stress work—such as faculty resistance—were taxing on the school leader, affecting his energy and commitment to the initiative, and his professional morale. Heifitz and Linskey (2002) call on the leader to “manage his hungers” during such work. The study found an ebb and flow to Committee member participation in the initiative; the participant-leader experienced a similar sensation, although the down periods were usually quite brief. In retrospect, this experience was likely a natural coping mechanism for the stress of school improvement work, a way for the leader to take a break and come back.
reinvigorated for the initiative. Fortunately, the participant-observer’s commitment, energy, and morale continued to trend upward as the study concluded.

The attention that the initiative garnered from the media was at first flattering, but later became a significant stressor to the leader. This became more evident as attention focused on the leader himself and as the requests for stories and access to Committee members grew. The participant-observer, by his nature, has always been uncomfortable with any attention on him (an irony given his position). Access to the initiative was essentially cut off after a front-page story in the *New York Times* (October 29, 2007) profiled the efforts of the school and created a backlash from some teachers whom the Committee needed for support. After this situation, the initiative became strictly internal in order to promote the conditions that would help it be successful, even if other schools would have a harder time learning about the work. The leader learned the hard way the challenge of managing the media.

Faculty buy-in was the greatest challenge facing the Stress Reduction Committee. The leader learned that before much else could be accomplished in an effort to improve school culture, faculty needed to be on board (for education is still a profession where if they wish, teachers can choose to shut their doors and do as the please). In accepting this challenge, the leader found the value in taking the following approaches:

- Do not stall action for fear of confrontation (i.e. conflict is inevitable).
- Remove the “you” from the equation; focus debate on the issues, not the person.
- Do not rely on positional authority to generate buy-in; people will accept a message if they believe in it or respect the person delivering it, not because the leader demands compliance.

- The leader must fully believe in the values of the initiative before putting his leadership on the line—as the participant-observer came to believe more strongly in the stress initiative, he became more comfortable leading conversations about it with faculty.

- Take advantage of smaller group settings when making one’s case. The leader achieved a breakthrough in faculty buy-in via the Faculty Council (a representative group of teachers charged with advising the principal in teacher-related issues).

- Take comfort in the support of allies, confidants, and administrative colleagues, and do not dwell on the criticisms of naysayers (listen to what critics have to say, but accept that some detractors are not grounded in reality or may be relishing their role in being a thorn in the leader’s side. One vexing example was the case of a teacher who was extremely vocal against the administration and the initiative, but received positive reports from students as being sensitive to and understanding of their stress.

Over his career, the participant-observer had led many committees in school improvement work, but the Stress Reduction Committee gave him the unique challenge of getting a very diverse membership to function smoothly to tackle a complex and controversial part of school culture. To use a classic analogy, he was leading the fixing of a
plane while it was in flight (and without knowing where it would land!). The participant-observer gained two insights into group processes, in particular: (1) let people be heard, but manage “long-windedness” (the leader became adept at kindly cutting off people enamored with their own voice), and (2) the four “d’s”: delete, delegate, do, or defer. The participant-observer became better at not taking on the detail of planning and implementation work, and instead acted in more of a steering role. Simply put, culture work like the stress initiative does not benefit from a control freak. One practical example of this concept was to enlist consultants for advice on planning and implementation efforts, such as how best to conduct surveys across three stakeholder groups.

The new learnings of the Committee

Heifitz (1994) distinguishes between leading with authority and leading without authority. The former comes from positional power (e.g. being Principal) and the latter come from those who do not carry positional power but can influence through credibility among their peers. As the stress initiative delved deeper into the school’s cultural issues, and presented more of a threat to some as a result, some faculty focused resistance on the participant-observer more so than the issues under debate. It became apparent that these detractors did not see the leader as credible to lead change on core teaching and learning issues, such as homework. This was perhaps due to their expectations on how the principal should spend his time, or in their view that a principal with only a few years of classroom teaching experience has no business asking others with more experience to change practices. The leadership lesson for the participant-observer was two-fold: (1) do not rely on formal
authority to exact change in people’s values and beliefs, and (2) enlist the help of faculty who have informal authority (i.e. credibility) to become allies in the culture work.

As illustrated in the findings section of this chapter and the preceding one, the leader wore two hats in the stress initiative: actively participating in and leading the Committee, and stepping back to observe the Committee’s work from a detached position. This dual-role activity was enlightening for the leader. It allowed him to suggest changes in how the Committee operated and then experience the changes first-hand. This approach seemed particularly useful in the adaptive, school culture work.

The participant-observer experienced a learning curve not only in his leadership but also with the techniques of stress management. Naming the stress problem, addressing challenges, and continuing to lead the school in other areas, created stress responses. Through embracing Senge’s (2006) discipline of personal mastery, the leader practiced relaxation methods and other techniques to cope with and manage his stress. Through this initiative, he came to believe more strongly that if the leader’s own house was not in order, he was in little position to set other houses in order.

Before this initiative, the participant-observer worked hard to promote the power of student voice. He believed the perspectives and ideas that students can provide was a vast and untapped resource to school leaders. The stress initiative validated this belief through genuine evidence, and did so in a challenging environment. When students were allowed to actively participate in the school improvement work, the leader benefited greatly from increased empathy, new ideas, and student ownership in the problem.
Jewel-on-the-Hill High School was fortunate to have easy access to a professional community in the New England area and beyond. The Committee’s partnerships with the Benson-Henry Institute, Stanford’s Stressed Out Students coalition, and other practitioners and researchers, led to useful advice on how it could proceed. The partnerships also provided access to resources the school could never create on its own (e.g. Benson-Henry’s stress management workshops). The leader learned to comb the external community for partnerships that could help the initiative. This became a continual activity for the leader.

Finally, because the leader and Committee took on the stress problem through a listening approach, ideas and advice would come from the strangest places: chance conversations with random people, literature outside of the education realm (e.g. Charlie Pierce’s 2007 biography on quarterback Tom Brady), and listening to National Public Radio on the morning commute. The leader learned to keep his radar up to new perspectives and links to the stress problem. As a result, it became easier to name the stress problem and generate actions to respond to challenges.

*The results of the Committee*

While the planning process played out, the Stress Reduction Committee decided to start addressing some issues right away (e.g. overscheduling). The leader was able to see the value of jumping in and *doing*. While this technique would not be advised for items that required stakeholder buy-in (e.g. homework policy), school improvement is predicated on action. In creating some “early wins”, the Committee was able to gain some confidence that it could exert positive change (even if small in nature) and the school community saw the group was one courageous enough to act on its convictions.
Many ideas that emanated from Committee discussions came through spontaneous insights. While it may have appeared random, the results were born in an organized and highly-structured environment, one which could foster such insights. The participant-observer tended to lead in a deliberate and systematic way, operating in the left hemisphere of his brain. However, he also recognized what right-brain tasks such as creativity, story, design, and empathy could offer the initiative. The stress work valued a left- and right-brain partnership, working in tandem, to offer both the sequential structure and the creativity that might lead to the most success (Pink, 2006). Examples of this included illustrating the stress problem via the school’s website and other communications through storytelling. The Committee also used metaphors to illustrate the stress problem. During group discussions, members attempted to “put themselves in the shoes of others” to foster empathy. The participant-observer not only encouraged creative brainstorming sessions, but sometimes required members to look at common problems in a unique way (e.g. the decision to reach out to students through personal technologies such as Facebook).

Although the bulk of this study was conducted in the first stage of school change, planning, there were several results that offered the participant-observer an opportunity for reflection: for example, the professional development stress workshop for teachers, and stress management sessions for students. He used an assessment framework to judge the impact the results had on the stress problem, and also how closely actual effect aligned to the intended effect. The leader learned the value of using a formative assessment approach to guide future Committee efforts—the learnings could be applied to future Action Plans.
The other findings not related to the research questions

There were other leadership learnings that were touched upon earlier in this section, but are worth mentioning again because they resulted from the findings not linked directly to a research question. The following served to guide the participant-observer in his leadership of the stress initiative, and will surely guide his future school improvement leadership:

- **Time is an ally to school improvement work, where an immediate crisis is not at play.** Do not try to find all the answers right away. Complex problems do not have easy fixes. Let the truth simmer up in an environment that supports collaboration and openness.

- **Spread out culture work to a wide constituency, and allow for an ebb and flow in participation and commitment to the work.** In doing so, the leader can better manage the stress of culture work and generate move pervasive ownership and advocacy.

- **Assist, but do not dictate.** Embrace the concept of directed autonomy, where the leader sets the direction of the work, but gives stakeholders the space to get there on their own (DuFour, 2003).

- **Keep momentum going, but pay attention to “initiative fatigue”**. Teaching is a taxing (and rewarding) endeavor. Melding school improvement work into a teacher’s day requires additional energy from the tank. The participant-observer learned to read when the Committee members’ energy levels lagged, and he postponed or slowed down the pace accordingly. The leader read the faculty-as-a-whole’s energy levels in a similar way.
Stay loyal to the initiative. In the stress initiative, the school community tested the leader’s commitment to the work. This required him to keep the stress problem in people’s consciousness, but also to model the types of behaviors the initiative called for. During the initiative, the leader received inquiries about leadership positions in other school districts, but he chose to see the initiative through to a more lasting impact. It gave him significant satisfaction to stick with a challenging school improvement effort over the course of several years.

The case of the Homework Calendar

The “life” of the Homework Calendar (HC) offers an interesting illustration in how the participant-observer’s leadership developed over the course of the initiative—his reflective journal offered the data for this introspection.

The HC was created a full two years before the stress initiative began in earnest. A neighboring high school had experimented with a “homework-free” vacation week in April. The following year, the participant-observer asked faculty to do the same during Thanksgiving, Christmas, February, and April breaks. To lessen the pressure this might put on curriculum coverage, some of the vacations were deemed “reduced homework”. The approach garnered a very positive reaction from parents and students, and little reaction from faculty. Another school year came and went with the homework philosophy in place. All was well, or was it?

Students and parents began complaining that many teachers were not adhering to the homework-free or reduced-homework periods. In fact, some teachers began openly speaking out against the calendar to their students. Compliance seemed to be getting better over time,
but there was still widespread, passive resistance to the HC. The principal had a difficult time putting a number to compliance, but it was likely somewhere around 50 percent.

At the start of the 2007-08 school year, the principal (at this time, formally studying the stress initiative) persisted with a revised HC that included the philosophy behind the approach, a printed calendar for the year (with the homework periods identified), and an endorsement from his administrative cabinet (department heads and directors). He included a “preferred testing days” provision that asked teachers to test only in the morning 90-minute periods (there were two daily) so as to limit the number of comprehensive exams students would face in a given day (this idea came from the student members of the Stress Reduction Committee). The new HC was distributed at a faculty meeting and the principal sought feedback. Only one teacher volunteered a suggestion on how to better implement the preferred testing days. Afterwards, a veteran teacher approached the principal and shared his concern that the HC didn’t allow him to keep up with his Accelerated curriculum (and this was why he could not follow the protocol). The principal was left feeling that the feedback was legitimate, but he did not know how pervasive this teacher’s view was among the faculty body.

The principal made a conscious decision to not follow up the teacher’s comment with his administrative cabinet. It was his belief that the teachers view was not pervasive among his peers, and that bringing up the HC with the administrative team may “open up a can of worms”. It seemed more important to push forward with the HC as it was written (and endorsed by the cabinet) and hope that compliance improved over time.
The *Times* (October 29, 2007) feature story came out in the fall of that year, and faculty dissent over the HC was a thread in the story. Here was indirect feedback that some teachers were not happy with the idea of reducing or eliminating homework during extended breaks. Again, it was unclear how many teachers shared this dissatisfaction. Nevertheless, the principal had a sinking feeling that not only was the view pervasive, but many teachers were associating the HC as the public face of the stress initiative—i.e. it was becoming a lightning rod for resistance. It appeared to make some teachers’ argument that the stress initiative was “anti-rigor” or “soft” more plausible in other’s eyes. This was a shame, for the Stress Reduction Committee firmly believed that reducing stress would *raise* achievement as well as promote health. It also gave the HC a larger status than deserved, for its implementation was a small piece to a much larger response to the stress problem.

The principal had a significant challenge on his hands: the low-impact HC could undermine the entire school improvement initiative. He decided to meet immediately with the school’s Faculty Council. The inter-departmental group was the formal voice of the faculty. He put the issue of the HC on the table and the group had a frank and honest discussion. The impact the HC had on advanced courses was echoed (and thus, validated) and other concerns were brought up, including avoiding restricting homework on three-day weekends, and finding a way to give teachers more flexibility in assigning homework (i.e. not pitting teacher vs administration in the students’ eyes). The discussion drained the principal’s reserves, but it was also cathartic. He was finally able to get to the root of the non-compliance, and the feedback came directly to him through a trusted source. He was also
able to communicate several of the stress initiative’s values and the purpose to the group, which he thankfully found they could accept.

The following month included a full-day professional development workshop for faculty on the stress initiative—a combination of education and stress management activities. The principal began the day with a PowerPoint slide simply titled, “Mea culpa”. He went on to explain how the Times article was neither what he expected nor helpful to the initiative, as well as sharing his embarrassment over the national response to the article. He also raised the Homework Calendar issue and said he would “table” the approach until he could further explore the faculty’s concerns with it. He would not give up on the HC, but he would pull back and be sensitive to the curriculum pressures faculty were experiencing. The rest of the workshop went smoothly and was deemed very successful based on formal and informal feedback.

Later in the school year, the principal returned to Faculty Council and worked out a basic framework for a homework calendar that was more teacher-friendly. The HC recognized that advanced courses needed to sometimes infringe on vacation periods (although only if absolutely necessary), that reading should not be considered homework (but rather, a lifelong habit), and that major assignments or tests should not come due on the day students return from vacation. The principal could live with each piece of the HC and was encouraged by the thoughtfulness of the group. He now had something in hand that he could implement in the coming school year and gain greater compliance to.

In analyzing what happened with the Homework Calendar, one could see the case as a failure in leadership, where faculty resistance successfully delayed a seemingly innocuous
idea. The case indeed contained many leadership foibles, as admitted to by this researcher. But, it should be viewed as consistent with what research on leadership tells us about school reculturing efforts. It should be viewed as a *success* of the stress initiative at Jewel-on-the-Hill High School.

The HC never had enough faculty buy-in to give it a reasonable chance of widespread compliance and to become a new part of the school’s practice. Rather than staying defensive or dismissive, the principal suspended the policy that won him such positive feedback from parents and students. With humility, he admitted to the mistakes in how he handled its implementation and was willing to take heat from others if he could do the hard work of convincing faculty of the HC’s value. Showing patience and persistence, he revisited the issue with the group he should have started with years earlier. He let go of control over the HC’s details and let the faculty devise a plan that would work best for them. The principal also believed that his informal authority to influence change around the stress issue was enhanced through this exercise.

*A creed*

In the waning moments of putting together this dissertation, the researcher reflected on his new understandings gained throughout the study process and coursework. In particular, he found clarity of purpose that could be captured in the following creed, from which he will live and lead by going forward:

*I have chosen to live a life of responsibility, to my family, to myself, to our school community as an ethical leader, and to the students I serve.*
As a result, I will strive to do better and be authentic, and be present by embracing personal and professional relationships with all those I have the fortune to meet.

In doing so, I may grow, find meaning and happiness in life and work, and contribute positively to this world.

VIII. Conclusion

Much like a chef puts together a disparate set of items into something worth eating, the author has put together a wide range of school issues into a study that he hopes will have value for school leaders. The chef does not create his meal alone but in partnership with many others who have cultivated the ingredients to where they can be of use. The author could not have completed this tome without the critical input from colleagues, mentors, and other researchers who have devoted their careers to improving the practice of school leadership. In addition, the author’s wife, a nurse practitioner at a highly-selective college, offered a unique glimpse into the stress culture struggles of college students. The author is indebted to these inspirational people for the wisdom they provided. In particular, Professor Denise Pope of Stanford University (Doing School), and authors Marilee Jones (Less Stress, More Success) and Sarah Bennett (Stop the Homework), provided early encouragement to explore the stress problem in an area of the country that seemed indifferent to it. The stacks in the libraries of Boston College, Stanford University, Wellesley College, Dartmouth College, and Smith College provided not only innumerable resources, but also inspiration during the writing process.
The researcher was fortunate to lead such a vibrant and supportive community in this school improvement initiative, and to have the support of the superintendent of schools. Jewel-on-the-Hill’s students, parents, faculty, and administrators threw their expertise and support behind the work. They brought an open mind to a problem that seemed difficult to define.

In thinking about today’s youth and the culture in which they try to succeed, the “boiled frog” parable comes to mind (http://allaboutfrogs.org, 2009).

They say that if you put a frog into a pot of boiling water, it will leap out right away to escape the danger. But, if you put a frog in a kettle that is filled with water that is cool and pleasant, and then you gradually heat the kettle until it starts boiling, the frog will not become aware of the threat until it is too late.

The frog’s fight or flight response allows it to take action when it is tossed into a boiling pot of water. Today’s suburban youth are instead living in a culture where the heat slowly rises as they progress through schooling. The effects of chronic stress can start long before students reach high school, and the “kettle” can boil over during adolescence or in early adulthood. Many students have become either desensitized to chronic stress or believe they must suffer to reap the extrinsic rewards life has to offer. Which is worse?

Communities must come together to recognize the disastrous effects chronic stress can have on its youth. The primary purpose of school is to foster learning and growth—students will not remember what they have been taught if they are in dire straights. Happiness must be experienced by our youth, rather than postponed until the rigors of schooling are finished. Chronic stress can rob families of their children during the only time
when they are all under one roof. Family vacations or dinners need not be eschewed because homework needs to be completed—what would happen if all students decided to stop doing their homework after two hours’ worth? And finally, physical and mental health is our fundamental possession that allows us to approach our potential. Chronic stress erodes health until our vitality is gone.

The author believes that schools have a primary and urgent responsibility to educate parents and form two-way partnerships, to help students exercise control to direct their learning, and to examine its own practices to ensure it will produce graduates who can thrive in the 21st century’s economic, civic, and social environments. He has a hollow feeling that schools continuing to educate students in a traditional way are preparing its graduates for a world that no longer exists, a world in which they cannot adapt to without great difficulty and distress, a world that may leave them behind, and with skills that may no longer be of use.

The author, however, is an eternal optimist, and recognizes that this country has a long and storied history of responding to crises in its society and its schools. We have the tools to respond to the stress problem, and we will, with creativity, tenacity, and commitment to making our youth our most valuable commodity. As Chinese philosopher Lao-tzu stated, “The journey of a thousand miles begins with the first step.” Let us take that first step together.
References


cheating. [Electronic version] Practical Assessment, Research & Evaluation, 8(5).


Cook-Sather, A. (2002a). A teacher should be...when the answer is the question. *Knowledge Quest, 30*(5), 12-15.

Cook-Sather, A. (2002b). Authorizing students' perspectives: Toward trust, dialogue, and


http://www.educationconservancy.org/


Social Psychology, 75(1), 156-165.


Do subversion of academic goals? Journal of Educational Psychology, 84(4), 553-562.


Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. Journal of Comparative Neurology and Psychology, 18, 459-482.


Appendix A

Stress Reduction Committee Charge (Revised)

Guiding Principles

*Purpose*

Educate and raise awareness on the impact of stress in the Jewel-on-the-Hill High School community in an effort to encourage health, engagement, resilience, and a broader definition of success.

*Shared Vision*

To achieve a school culture in which exists quality personal relationships, healthy behaviors, positive connections, balance, and diverse definitions of success within a growth-oriented environment that is challenging and ethical.

*Shared Values*

- Relationships
- Health
- Happiness
- Self-awareness
- Balance

*Key Messages*

⇒ There are stressors that we should care about. Some stress is good, in fact. Chronic, negative stress, however, can be both a health and learning problem.
⇒ There are effective ways to cope with stress.
⇒ There are stakeholders who own this problem: the student, the school, the home, and the community.
⇒ Addressing stress without compromising academic standards will enhance achievement, and lead to happier, healthier, and more resilient students.
⇒ Success needs to be defined more broadly than on just performance measures.
⇒ Balance of self, behaviors, and choices is achieved through the process of self-awareness.
⇒ Relationship-building and understanding others can powerfully reduce stress.
⇒ There are local and national data, as well as research, that can help build awareness around stress issues.
Goals

1. Provide students the skills and capacity to allow them to better manage their stress and that of their peers.
2. Help students foster self-awareness and build other skills to cultivate resiliency, help them find meaning in their studies, and help them develop a more holistic definition of success.
3. Educate parents so they can better support their child’s health, learning, and happiness.
4. Make recommendations to address school or district practices that contribute negatively to student stress while maintaining Jewel-on-the-Hill’s high expectations and standards.
5. Build awareness and empathy in the school community.
6. Create an infrastructure to implement and institutionalize strategies to meet the aforementioned goals.

Connection to School/District Values

- “Make healthy and responsible decisions.” (JHS Social Expectation)
- 2007-2009 School Improvement Plan Goal #3
- District’s Goal #2: Social and Emotional Learning
- District’s Goal #1: Standards-based Learning
- “The balanced student is able to participate actively in school and society, be creative, and self-advocate while determining his or her unique path to fulfillment.” (School’s Mission Statement)

Key Questions to Ask

Q How can we best prepare students to engage in learning? To be healthy? To be happy? To be successful?
Q What is the impact of stress? Why should we care?
Q What role & responsibility does each group have in the stress problem and the remedy to it?
Q What is a more holistic definition of “success” (rather than just the right grades, scores, and getting into the right college)?
Q How can parents best support their child’s learning and health?
Q How can the school best support teaching and learning, and maintain its excellence and rigor while addressing stress?
Q How can the stress initiative stay active and respond effectively?
Appendix B

Stress Reduction Committee Charge (Original)

Guiding Principles

Purpose

Explore, analyze, and make recommendations for action to address academic-based stress at Jewel-on-the-Hill High School.

Goals

- Provide students the skills and capacity to allow them to better manage their stress and that of their peers.
- Help students foster self-awareness and build other skills to cultivate resiliency, help them find meaning in their studies, and help them develop a more holistic definition of success.
- Educate parents so they can better support their child’s health, learning, and happiness.
- Make recommendations to address school or district practices that contribute negatively to student stress while maintaining Jewel-on-the-Hill’s high expectations and standards.
- Build awareness and empathy in the school community.
- Create an infrastructure to implement and institutionalize strategies to meet the aforementioned goals.

Shared Vision

Move students away from unhealthy stress-coping behaviors toward healthy stress-management techniques by fostering students’ self-awareness and mindset, building students’ internal controls, fully engaging students in learning, partnering with parents in positive ways, and by reducing external stressors.

Connection to School/District Values

- “Make healthy and responsible decisions.” (School-wide Social Expectation)
- School Improvement Plan Goal #3
- District’s Goal #2: Social and Emotional Learning
- District’s Goal #1: Standards-based Learning
“The balanced student is able to participate actively in school and society, be creative, and self-advocate while determining his or her unique path to fulfillment.” (School’s Mission Statement)

Key Questions to Ask

- How can we best prepare students to engage in learning? To be healthy? To be happy? To be successful?
- What is the impact of stress? Why should we care?
- What role & responsibility does each group have in the stress problem and the remedy to it?
- What is a more holistic definition of “success” (rather than just the right grades, scores, and getting into the right college)?
- How can parents best support their child’s learning and health?
- How can the school best support teaching and learning, and maintain its excellence and rigor while addressing stress?
- How can the stress initiative stay active and respond effectively?

Group Norms for Committee Interactions

First Developed March, 2007
Aligned with Superintendent’s Leadership Norms

- A respectful environment
- No surprises
- On-time for meetings
- Nonjudgmental and no blame
- Open and honest feedback
- To disagree or question is OK (it’s an opportunity to learn)
- Don’t assume motives or make untested assumptions
- Keep confidentiality
- Understand different perspectives
- Specific, focused and purpose of meeting reflected in agenda
- Need to support and care for one another
- When a decision is made, everyone owns it (even if not agreed with)
- Willing to participate and be invested in the meeting
- Sense of humor/collaboration/sharing
- Accept feedback on one’s work; resist defensiveness
- Loyalty, trust and honesty
- Communication to the Media handled by Principal or designee
Appendix C

Communication Plan

Glossary

Discussion = different views are presented and defended on relatively simple issues and a decision is made on the best view to support (in order to move forward on an action) (Senge)

Dialogue = complex issues are explored via a facilitator; individual assumptions and views are presented, but people in the group do not cling to their own biases in order to listen and understand the various viewpoints on the table; conflict among members is used as a benefit. Participants see each other as colleagues, a relationship based on trust. A deeper understanding or meaning of the issue is generated and new ideas are tested. Team learning is produced. (Senge)

Groupthink = a type of thought exhibited by teams who try to minimize conflict and reach agreement without critically testing, analyzing, and evaluating ideas. Social fear or anxiety is usually at the cause of this behavior. Consequences for groupthink can be severe. (Janis)

Reflective Openness = being able to look at one’s own way of thinking and being able to question oneself for biases or distorted decisions (e.g. defensiveness based on emotions) (Heifitz)

Communication Framework

Characteristics:
  o Designed to elicit a response from a target
  o Has a message, but doesn’t preach
  o Is in a “language” that can be understood
  o Is dynamic – allows for information to go more than one way; can be learned from
  o Allows for feedback on its effectiveness
  o Recognizes assumptions, both the communicator’s and the receiver’s

Types of communication:
  o Verbal
  o Non-Verbal
  o Written
  o Intercultural
  o Structural
Symbolic
Political

Values:
- Open & honest
- Respect different perspectives
- Informative (offers something)
- Questioning & constructively critical
- Layered communication

Topics/Issues to be Communicated

1. What is the impact of stress? Why should we care?
2. What role & responsibility does each group have in the stress problem and the remedy to it?
3. What are warning signs or concerns that may point to a stress problem?
4. What is stress? What does research say about it?
5. What is the Stress Reduction Committee? What is its purpose, goals, vision, etc?
6. How does this work relate to broader school values and initiatives?
7. What data do we possess to illustrate the problem?

Key Messages

1. There are stressors that we should care about. Some stress is good, in fact. Chronic, negative stress, however, can be both a health and learning problem.
2. There are effective ways to cope with stress.
3. There are stakeholders who own this problem: the student, the school, the home, and the community.
4. Addressing stress without compromising academic standards will enhance achievement, and lead to happier, healthier, and more resilient students.
5. Success needs to be defined more broadly than on just performance measures.
6. Balance of self, behaviors, and choices is achieved through the process of self-awareness.
7. Relationship-building and understanding others can powerfully reduce stress.
**Communication Table**

<table>
<thead>
<tr>
<th><strong>Impact of Stress on Students</strong></th>
<th><strong>Students</strong></th>
<th><strong>Parents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Symptoms)</td>
<td>Physical: Sleep deprivation; digestion problems; lack of exercise; nutritional deficits; lack of energy</td>
<td>Physical: sleep deprivation or too much sleep; sickness and health; poor appetite and nutrition</td>
</tr>
<tr>
<td></td>
<td>Academic: Grades, focus on “ends” (skewed view on achievement); less likely to collaborate with peers</td>
<td>Academic: negative observations about school, teachers, or classes; wanting to stay home; unable to prioritize or problem-solve a school issue; “what’s the point?” (lack of caring)</td>
</tr>
<tr>
<td></td>
<td>Emotional: impact on parental relationships; controlling emotions/mood; apathy; self-esteem, self-confidence, agency, efficacy; perfectionism</td>
<td>Emotional: mood swings; family relationships; happiness; confidence and self-esteem; poor choices</td>
</tr>
</tbody>
</table>

A “cycle” of stress (loop)

<table>
<thead>
<tr>
<th><strong>Target</strong></th>
<th><strong>School</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact of Stress on Students</strong></td>
<td>Physical: sleep deprivation; sickness and health</td>
</tr>
<tr>
<td>(Symptoms)</td>
<td>Academic: “doing school” (not motivated for learning’s sake); poor decision making; trying to “get by”; cheating</td>
</tr>
<tr>
<td></td>
<td>Emotional: lots of anxiety; negative impact on teacher/student and student/student relationships; mood swings</td>
</tr>
</tbody>
</table>
### Targets

<table>
<thead>
<tr>
<th>Roles &amp; Responsibilities</th>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Students cause a big piece of their stress (self- and peer-inflicted pressure, over-commitment)</td>
<td></td>
<td>- Recognize negative impact parents may have on children (our own behavior or stress)</td>
</tr>
<tr>
<td>- Apathy toward their responsibility (lack of agency)</td>
<td></td>
<td>- Model positive stress coping strategies</td>
</tr>
<tr>
<td>- Social/cultural norms perpetuated</td>
<td></td>
<td>- Taking a “longview” toward achievement (limit PowerSchool viewing)</td>
</tr>
<tr>
<td>Attitudinal change required including more ownership and agency on the problem and solution</td>
<td></td>
<td>- Recognize stress levels of their young adults</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Listen better to their young adults</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Minimize reactions based solely on emotions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Give students space to make decisions and accept responsibility (e.g. hovering)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Make college process about them, not you (best fit)</td>
</tr>
</tbody>
</table>

### Target

| School |
|--------------------------|----------|
| Roles & Responsibilities | |
| - Recognize impact adults have on students (workload) | |
| - Foster relationships & connections (supports) | |
| - Show flexibility and help problem-solve | |
| - Clear structure and expectations | |
| - Foster positive school climate (e.g. modeling) | |
| Key Messages | |
| - Reduce stress, when feasible | |
| - Foster a love of learning | |
### Targets

<table>
<thead>
<tr>
<th>Students</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warning Signs</strong></td>
<td><strong>Warning Signs</strong></td>
</tr>
<tr>
<td>- Extreme behavior on the negative end of the impact spectrum</td>
<td>- Extreme behavior on the negative end of the impact spectrum</td>
</tr>
<tr>
<td>- Rapid, negative change in behavior, personality, or mood</td>
<td>- Rapid, negative change in behavior, personality, or mood</td>
</tr>
<tr>
<td>- Procrastination</td>
<td>- Procrastination</td>
</tr>
<tr>
<td>- Learned Helplessness</td>
<td>- Learned Helplessness</td>
</tr>
<tr>
<td>- Perfectionism</td>
<td>- Extreme focus on grade or worth of assignment</td>
</tr>
<tr>
<td>- Drug and Alcohol as coping strategies</td>
<td>- Talk about drug and alcohol as coping strategies</td>
</tr>
<tr>
<td>- Lack of participation in family activities</td>
<td>- Lack of participation in family activities</td>
</tr>
<tr>
<td>- Loss of interest or motivation</td>
<td>- Loss of interest or motivation</td>
</tr>
<tr>
<td>- Attendance/behavioral problems</td>
<td>- Attendance/behavioral problems</td>
</tr>
<tr>
<td>- Recurring illness and other physical signs (e.g. cutting)</td>
<td>- Recurring illness and other physical signs (e.g. cutting)</td>
</tr>
</tbody>
</table>

### Target

<table>
<thead>
<tr>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warning Signs</strong></td>
</tr>
<tr>
<td>- Extreme behavior on the negative end of the impact spectrum</td>
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</tr>
<tr>
<td>- Learned Helplessness</td>
</tr>
<tr>
<td>- Extreme focus on grade or worth of assignment</td>
</tr>
<tr>
<td>- Talk about drug and alcohol as coping strategies</td>
</tr>
<tr>
<td>- Lack of participation in class</td>
</tr>
<tr>
<td>- Attendance/behavioral problems</td>
</tr>
<tr>
<td>- Recurring illness and other physical signs (e.g. cutting)</td>
</tr>
<tr>
<td><strong>Targets</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
</tbody>
</table>
| **Vehicles to use to Communicate** | - Personal communication through teachers, counselors, and parents  
- “Structure/Culture” of school  
- Scenarios and Strategies  
- PE/Health or other curriculum  
- Enlisting former students  
- Informal social networks | - Parent assemblies  
- Speakers/Forums  
- Newsletters  
- Principal’s email list  
- Website  
- Parent coffees  
- Informal social networks |
| ** Teachers** | - Utilize staff who have credibility  
- Faculty Meetings  
- Department Meetings  
- Modeling positive culture and behaviors (e.g. running club)  
- Making structural adjustments to reduce stress or promote better decision making |
Appendix D

Starting a Group to Address Student Stress

Getting Started

- Gain support from the school and district’s leadership.
- Establish a diverse, representative group that includes parents, teachers, and predominantly students. When possible, enlist teachers who have significant credibility among colleagues.
- Recognize that this work is *adaptive* in nature and will require learning by all.

*First Steps for the Group*

- Assess the environment for its capacity for change and the level of tension existing. How large is the gap between what the school values versus what it does or what one sees?
- Establish goals, values, beliefs, assumptions, group behavioral norms, as well as guiding strategies for communication and school change. This leads to developing a *shared vision*.
- Link values, beliefs, etc. to school and district values, goals, and other improvement initiatives, where existent.
- Establish a network of resources, support, allies, and expert consultants that can be tapped when needed.
- Recognize three distinct stakeholders in this issue: students, parents, and schools. Each has ownership in improving the culture and none alone bear the brunt of the responsibility. Work to understand the unique perspective of each stakeholder.
- Conduct a survey with students (perhaps also with staff and parents) to gather data on the scope and characteristics of the stress problem that is unique to your school culture. Use the results to inform the committee’s work as well as establish urgency with the school community.

*Committee Practices*

- Establish a mechanism to measure the effectiveness of the school’s actions to address student stress. Reflect periodically and use information to inform future actions. (i.e. formative assessment)
- When working through a topic to develop potential actions, combine contemporary research with anecdotal evidence and local data to inform the decisions. Promote *dialogue* in order to foster team learning.
- Stay on a constant quest to educate the committee on the school stress issues and processes of school change. Promote and encourage personal mastery.
- Celebrate successes. Learn from failures.
- Continually test assumptions.

Managing Resistance and Conflict

- Recognize a level of distress as normal to change initiatives and as an opportunity to engage and learn.
- Identify what issues and contradictions are at play. Is there historical precedent?
- If distress deemed too high, take steps to lower it to a tolerable range. If tension is too low, find a way to raise it (i.e. “ripen the issue”).
- In some situations, it may be necessary to make decisions without approval from all factions.

Things We Have Learned in this Process

- Convincing some faculty that the stress initiative is worthwhile has been our most challenging work. Two approaches have been effective: 1) connecting the stress problem to learning, engagement, retention of knowledge, etc. (and backing it with data); 2) validating the stressors teachers are under.
- The student perspective and suggestions they generate tend to be the most valuable and informative.
- At some point, you have to “jump in” and implement some actions. Choose carefully what you do, however, because it will draw critique and many will associate the committee with a particular action. Gauging the environment is key.
- The stress problem is a complex one, rooted in school culture. Consequently, this work is an exercise in persistence, patience, positive thinking, and one that requires a “thick skin”. It is adaptive in that it requires a change in attitudes and beliefs, which in turn necessitates learning.
- Group Meetings: agendas are typically a mix of exploring new stress topics, assessing, planning, and reflecting our efforts, and implementing action plans (usually done in small groups and not part of the whole committee).

Examples of Connection to District-wide Initiatives at Jewel-on-the-Hill

- Social and Emotional learning
- Standards-based learning
- Advisory Groups
- Health and Wellness

Examples of Jewel-on-the-Hill’s Actions Completed or In Progress

- Stress management workshops (for students)
- Stress content incorporated into student and parent assemblies
- Creation of a website
- Removal of honor roll from the newspaper
- No Homework Calendar
- Assignment Calendar
- Revision of Ethics Policy
- Professional development workshops (for teachers)
- “Good teaching practices” video (created by students to show to teachers)
- Examination of web-based grade access for parents
- Examination of weighted GPA system

_Potential Actions on the Committee’s Radar_

- Revision of Homework Policy
- Reducing the number of sections teachers’ carry
- Limiting number of AP courses students can take
- Limiting number of extra-curricular activities students can participate in and the hours it takes place
- Pushing for a later school start time
- Parent Book Clubs
- Creating “seminars” for students to address transition issues, as well as stress topics, study skills, and other issues.

_Resources_

- Benson Henry Institute’s Education Initiative (www.mbmi.org)
- American Academy of Pediatrics (www.aap.org)
- Stressed Out Students (Stanford) (http://www.stanford.edu/dept/SUSE/sosconference/)
- The Education Conservancy (http://www.educationconservancy.org/)

_Reading List_

- Doing School by Denise Pope
- The Price of Privilege by Madeline Levine
- Mindset by Carol Dweck
- The Blessing of a Skinned Knee by Wendy Mogel
- College Unranked by Lloyd Thacker
- Queen Bee Moms & Kingpin Dads by Rosalind Wiseman
- Less Stress, More Success by Marilee Jones and Ken Ginsburg
Appendix E

Topic Framework

Topic: Sleep

What perspectives can students, teachers, or parents offer on this topic? (i.e. what are they seeing?)

Students:
- up very late and students have accepted it as “normal” for the culture
- believe sleep is a very important issue to address
- for some, there is little change to recoup the hours of lost sleep
- some come to school in a daze and find it difficult to function
- their sleep deprivation (and bedtime) has gotten worse as they’ve gotten older

Parents:
- it’s sometimes/often hard to get their children to school in the morning
- they question whether it’s best to force their children into school when they are in rough shape (i.e. physically ill from stress, lack of sleep, etc.)
- they see their kids prioritizing what tasks/activities they will do; sleep is often compromised
- parents will sometimes allow their children to miss school to catch up with sleep

Teachers:
- see some students that are sleep-deprived with “little to give” in class
- see some students as coping well or not having sleep as an issue
- they hear from similar stories (as those above) from colleagues

Special Note:
- all three groups agree that their personal performance drops when they are sleep deprived

What does research say on this topic? (e.g. causes, effects, influences, etc.)
- Biological affects due to sleep cycles and melatonin levels (Black, 2000)
- Effects on learning and student achievement are incomplete (Jewel-on-the-Hill, 2003).
- School start times are often looked at as a solution to the problem (Wahlstrom, 1999). Evidence of effect on learning is incomplete; however. It does appear to increase the amount of sleep students get.
- Some researchers believe that one cannot physically catch up lost hours of sleep
- Sleep helps memory formation (NPR podcast)
- The typical teen needs 7-9 hours
- The choices students make can make a difference in how well they sleep

What data do we possess on this issue?
- Stress Survey: 57% of students say they don’t get enough sleep
- Jewel-on-the-Hill Sleep Study
- Tardy and Absenteeism stats
- Anecdotal evidence from students, parents, and teachers

Does this topic intertwine with or influence another topic or topics?
- Homework
- Home influences, including bedroom environment
- Drug/alcohol abuse
- Over-scheduling
- Time commitment of school-related activities

Who are the stakeholders (i.e. who needs to be involved)?
- Students
- Parents
- Teachers
- Employers
- Coaches/Advisors
- Administrators
- “Everyone”

What action(s) could be taken on this issue?
- Educate students and parents on how to get higher quality sleep
- Consider adding to Health class curriculum
- Explore a school start time change
- Collect further data to illuminate the issue
- Change to a later testing schedule for final exams
- Decrease amount of homework
- Create “sacred zones” in which activities could not be scheduled
- Help students with relaxation techniques

What obstacles could stand in the way of making improvements?
- Politics of a school start time change, as well as bus schedules and athletics (see Jewel-on-the-Hill Sleep Study report)
- Schedules are difficult to change
- The “human” factor
- Students letting go of technologies in the bedroom
- $$$
- Our committee’s lack of credibility in the community (because we’re new)
- Culture of overachievement, homework, and competition is entrenched
- School’s expectations on teachers to cover a lot of content
- “What’s the big deal?” attitudes
- College admissions offices

What resources are available to make improvements?
- Prior sleep study report
- Use of the media to get the word out
- Sleep clinic in Jewel-on-the-Hill

What are the next step(s) the committee could undertake?
- Explore a later start time for the final exams in June
- Present to the faculty on the sleep issue
- Write to the parents via a newsletter on this issue
- Work on creating a Reading List for parents
- Create a Facebook account to communicate with students
- Create a year-long Homework Calendar to set “No” and “Reduced” homework periods
- Consider creating “sacred zones” in which activities could not be scheduled
- Consider limiting the number of Advanced Placement courses and/or school-related extra-curricular activities a student could take
- Consider long-term goal of changing school start times
- Extend college meeting into grade eight to be more proactive on positive messages about stress
- Explore PE exemptions for students in organized sports and give a study hall instead
- Incorporate sleep information into regular class instruction rather than just PE/Health courses
Appendix F

Action Plan Template

Date Created: __________
Last Updated: __________
Completed: __________

Initiative: _____________________
Liaison: _______________________
Sub-Committee Members: __________________________

Description of Initiative:

Goal this Initiative will Address:

Resources and Strategies Needed to be Successful:

Potential Obstacles and Plan to Overcome These:

Measurement of Success (how will data be gathered to evaluate initiative?):

Progress to Date:

Project Plan:

<table>
<thead>
<tr>
<th>Next Steps</th>
<th>Timeframe</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note: Adapted from SOS Planning Guide)
Appendix G

Assessment-Status Report (Action Plan)

**Action Plan #4: Parent and Student Assemblies**
*Created: June, 2007*
*Completed: September, 2007*

<table>
<thead>
<tr>
<th>Needs Assessment</th>
<th>Program Planning</th>
<th>Implementation Evaluation</th>
<th>Progress Evaluation (Formative)</th>
<th>Outcome Evaluation (Summative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help educate parents and students on the stress problem</td>
<td>The forum</td>
<td>The action was closely related to the desired goal</td>
<td>Formal Feedback on effectiveness of assemblies</td>
<td>Parents: the content, especially the Andy Bishus role play, received extremely positive reviews</td>
</tr>
<tr>
<td>Provide an avenue to give advice for managing the problem</td>
<td>What type of information/advice might be useful?</td>
<td></td>
<td></td>
<td>Students: some positive reviews, but also a lot of confusion about what this was all about</td>
</tr>
<tr>
<td>Help illustrate that stress is a problem for many</td>
<td>Stanford's SOS Resources</td>
<td></td>
<td>Refinement of content (more on committee)</td>
<td>Overall: Successful and something to continue in coming years</td>
</tr>
</tbody>
</table>
Appendix H

PowerSchool Contract & Action Plan

Date Created: September, 2007
Last Updated: May, 2008
Completed: October, 2008

Initiative: PowerSchool Parent Access Analysis
Liaison: Paul Richards
Sub-Committee Members:

Description of Initiative:
- Analyze parent and student use of online access to PowerSchool’s gradebook to determine the extent this access is a stressor or diminishes the ability for students to self-direct their learning experience.

Goal this Initiative will Address:
- Ensure that the service is being used appropriately and meeting its goals
- Analyze the school’s role in causing stress on students or teachers

Resources and Strategies Needed to be Successful:
- PowerSchool access statistics
- Teacher survey
- Discussions on its use

Potential Obstacles and Plan to Overcome These:
- Parents are strongly supportive of this access and may feel threatened
- How do you determine whether this service is a stressor? Relate to perfectionist tendencies?

Measurement of Success (how will data be gathered to evaluate initiative?):
- Obtain data that leads us to draw reliable conclusions about online access

Progress to Date:
- Tabled until after first term closes (early-Nov.)
- Student Council has weighed in on the service
- Cabinet has provided guidance on how to proceed with the issue:
  - It sees the tool as potentially useful, but recognizes that it can be misused by both students and parents. It is unclear as to the extent of the problems raised by Student Council.
Ultimately, the standards-based work will lessen the emphasis on single grades, which may help with this problem.

Ms C. will look into removing the e-mail alert option for parents. This service may do more harm than good.

It is not technically possible to turn the grading access on and off, without losing the needed attendance and demographics access.

It recommended the following actions:

- Work with Student Council to develop content for the opening parent and student assemblies
- Work with Student Council to empower students to better manage their parents’ intrusiveness into their grades, perhaps through a contract.
- Get the word out to parents as to why they should allow their children to manage their grades
- Enforce improper access consequences
- Continue to work with teachers to provide useful and clear information onto PowerSchool
- Remove the “E-mail Alert” option (a district-wide decision is necessary)

Project Plan:

<table>
<thead>
<tr>
<th>Next Steps</th>
<th>Timeframe</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gather data from Mr. M. (tech support)</td>
<td>Mid-November</td>
<td>Principal</td>
</tr>
<tr>
<td>Discuss with Student Council</td>
<td>November</td>
<td>Principal</td>
</tr>
<tr>
<td>Discuss with Cabinet</td>
<td>March</td>
<td>Principal</td>
</tr>
<tr>
<td>Meet with Student Council again</td>
<td>March</td>
<td>Principal</td>
</tr>
<tr>
<td>Contract developed</td>
<td>May – June</td>
<td>Student Council</td>
</tr>
<tr>
<td>Remove “E-mail Alert” option from PS</td>
<td>Summer, 2008</td>
<td>Principal</td>
</tr>
</tbody>
</table>

(Note: Adapted from SOS Planning Guide)
Parent – Student Contract for Parental PowerSchool Access
Jewel-on-the-Hill High School

In order to establish effective and efficient communication between students, parents, and teachers, and to promote self-management and problem solving skills as well as teacher-student relationship building, it is strongly encouraged that parents/guardians and students who choose to use PowerSchool to monitor academic performance agree upon the following guidelines:

1. Accept that it is first and foremost the student’s responsibility to monitor his or her grades.
2. Accept that if a posted grade needs clarification or intervention, it is the student who should initiate a discussion with the teacher. (Parents are encouraged to help coach their children through this process, but not actively participate in the contact.)
3. Recognize that teachers are required to update their gradebooks once at the midterm and again at the end of the each term—some teachers, at their discretion, may update gradebooks more often. As a result, students should access their PowerSchool grade report no more frequent than once per week. Excessive use of PowerSchool benefits neither the student, parent, nor teacher.
4. Recognize that gradebooks are verified at the end of each term, and that gradebooks may contain mistakes that can be rectified easily. (Teachers enter thousands of scores into their gradebooks each year.)

PowerSchool access has been granted in order to improve conversations about student achievement both at home and at school. When utilized appropriately, communication’s efficiency and effectiveness is enhanced. When misused, PowerSchool access can become a significant stressor and be detrimental to the relationships between parents, students, and teachers.

This contract asks parents to cede the monitoring of student gradebooks to their children, unless the following behaviors are exhibited (at this point, the contract would be voided):

- The student lies to their parents about the scores in the gradebook, its worth, or their performance in the course.

I, ____________________, agree to adhere to these guidelines.

parent/guardian

I, ____________________, agree to adhere to these guidelines and accept the responsibilities associated with PowerSchool access.

student
# Appendix I

## Time Management Activity

Jewel-on-the-Hill High School Course Selection Process

**FILL OUT FOR YOUR BUSIEST SEMESTER**

<table>
<thead>
<tr>
<th>School Activities</th>
<th>Avg. Hours/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>School (5 days X 7 hours)</td>
<td>35</td>
</tr>
</tbody>
</table>

**Anticipated Homework for Leveled Courses:**

- **Advanced Placement:** 1+ hour x 5 nights weekly x # of courses
- **Accelerated:** 1 hour x 4 nights weekly x # of courses
- **Honors & Standard:** 0.5 hours x 4 nights weekly x # of courses

<table>
<thead>
<tr>
<th>Total School Hours:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Extra-Curricular Activities</th>
<th>Avg. Hours/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid Job</td>
<td></td>
</tr>
<tr>
<td>Hobbies/Interests/Clubs</td>
<td></td>
</tr>
<tr>
<td>Community Service</td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
</tr>
<tr>
<td>Music/Performances</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Extra-Curricular Hours:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Daily Living Activities</th>
<th>Avg. Hours/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep (7 days X 9 recommended hours)</td>
<td></td>
</tr>
<tr>
<td>Physical Activity (1 hour recommended—may be sports or PE)</td>
<td></td>
</tr>
<tr>
<td>Necessities (eating, showering, chores, etc.)</td>
<td></td>
</tr>
<tr>
<td>Family Time</td>
<td></td>
</tr>
<tr>
<td>Free Time (friends, TV, phone, Internet, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Daily Living Hours</th>
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</table>

**TOTAL HOURS**

<table>
<thead>
<tr>
<th>School Hours</th>
<th>Extra-Curricular Hours</th>
<th>Daily Living Hours</th>
<th>Available Hours/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>168</td>
</tr>
</tbody>
</table>

YOUR TOTAL HOURS: ________________ VS. 168

This activity is intended to help students anticipate the time they will need to remain healthy, happy, and engaged learners.
Dear Parents:

The high school recognizes that managing academic stress is a daily challenge for most students. The school’s practices, the culture of achievement at Jewel-on-the-Hill, and expectations students put on themselves, and those from teachers, peers and home, lead to growth, achievement, and success in and out of school—we will preserve the positive aspects of the high school experience that has led to this. However, these same factors can also contribute to unhealthy stress. When stress becomes chronic, it can negatively affect learning and health.

Through its Stress Initiative, Jewel-on-the-Hill High School is tackling the academic stress problem head-on. Specifically, its focus is on three distinct stakeholders:

- **Students:**
  - Provide students the skills and capacity to better manage their stress.
  - Foster self-awareness and a more holistic definition of “success”.

- **Parents:**
  - Educate parents so they can best support their child’s health, learning, and happiness.

- **School:**
  - Examine school and district practices to ensure they best support students’ learning and growth.

This letter will highlight a few components of this initiative that are new since I last wrote to you in the winter of last year.

**Stress Website**
It’s finally ready! You can soon access the site off of the main page of the high school. You can also use the following link:…The site contains a wealth of information and resources on student stress. Please consider sitting down to review the site as a family. Also, we welcome ideas on how to make the site most useful to the community.

**Student & Parent Assemblies**
The Class assemblies at the beginning of the year will address stress and how students can better manage it. We also encourage you to attend the Class parent nights (Grade 9: Sept. 4; Grade 10: Sept. 5; Grade 11: Sept. 9) to receive information tailored to what parents can do to best help with their child’s stress.
**Homework**
Homework practices have been consistently identified by parents as an issue needing examination. After extensive conversations with the Faculty Council on an approach that will not compromise the integrity of the curriculum, the “No Homework” policy has been revised and will be ready for distribution in September. Likely via School Council, the school will closely examine the existing homework policy to ensure homework has purpose, is given in appropriate amounts, and is consistent across courses, among other aspects of the issue.

**Partnership with Benson-Henry Institute for Mind-Body Medicine**
Through this partnership, we were able to offer a series of eight stress management workshops to 130 juniors and sophomores via their Wellness courses. The Institute will partner with Jewel-on-the-Hill High School in 2008-09 to offer two services: (1) eight stress management workshops to all incoming sophomores in their second semester Wellness courses; and (2) train a group of teachers across departments to incorporate stress-reducing techniques into their regular instruction. Please see the separate insert in this mailing about the Institute’s research at Jewel-on-the-Hill High.

**Parent Newsletter & Improved Communication**
A group of parents have met and will produce a biannual newsletter for parents. The publication will include useful information and resources, share the parent perspective, and share book reviews. The Stress Committee will spend the bulk of its time in the coming year acting to improve communication with the various stakeholders.

**Parent-Student PowerSchool Access Contract**
Included in this summer mailing is a contract developed by Student Council. It asks that parents allow their children to solely manage the grade reporting aspect of PowerSchool and not have parents log in themselves to check grades. It sets up parameters to build students’ responsibility around this issue. Students have identified parent PowerSchool use as a significant stressor and have asked for greater control over managing their high school experience.

**School Culture Initiative**
The school has embarked on a culture initiative aimed at building a better schoolwide cohesiveness, consistency, and climate. It centers on establishing and improving upon all aspects of our relationships.

**Data**
We will spend the fall analyzing student, faculty, and parent surveys to help guide the stress work and determine how pervasive the problem is.
The Value of Meaning
Adapted from Daniel Pink’s *A Whole New Mind*

“…man’s main concern is not to gain pleasure or to avoid pain but rather to see a meaning in his life.”
- the late psychiatrist and Auschwitz survivor Viktor Frankl

Dr. Frankl also emphasized that suffering is not a prerequisite to finding meaning. While it is wholly normal and necessary for the high school experience to be one of ups and downs, failures and triumphs, and particularly awkwardness, suffering should be seen neither as normal nor necessary.

Part of the stress initiative’s work is to recapture for our youth the high school experience that most of us were familiar with in the past. When students “do” school or are willing to suffer to produce a perfect transcript, we have missed the prime opportunity adolescence provides to foster growth through learning. Of course, growth requires a particular mindset and responsibility from the adults who are in partnership with the student.

In an age where most of us now have ample material and informational wants, we ask that you as a family reflect on the growing meaning want in society. To begin the search for meaning in school, one should start taking spirituality seriously and start taking happiness seriously.

Spirituality is more broadly defined as concern for the meaning and purpose of life. School’s purpose is widely understood but its meaning is highly individualized and based on perception. Ask your children what meaning they place on school, on its purpose. Their answers may help you understand how they perceive school and whether you are comfortable with their viewpoint.

Happiness derives from a mix of factors, including a biological component. Other aspects include engaging in satisfying work, avoiding negative events and emotions, and having a rich social network. Also important are gratitude, forgiveness, and optimism.

Students and adults alike can foster spirituality and happiness (and thus find meaning) through self-awareness: by knowing what your strengths and interests are and acting on them. In school, this can mean choosing courses and activities based on interest, applying to colleges that will be a good match between institutional and personal values, and working hard to rectify deficiencies in skills and knowledge. It is this journey through school that can provide the most meaning and purpose to a young person.

Consider these two activities to foster meaning:

1. “But Out”: Compile a list of important changes you’d like to make in your life and what’s keeping you from realizing them. (e.g. “I’d like to exercise more, but I can’t find the time”). Once written, go back to each item and replace the word but with the work and. This will move you out of excuse-making mode and into problem-solving mode. (e.g. “I’d like to exercise more, and I can’t find the time. So I need to formally schedule exercise into my daily routine, perhaps by walking at lunch.”)
2. “Unplug”: Select one day (or a few hours in a day) and totally unplug from technology and from your work. Don’t answer email or voicemail. Treat it as a Sabbath for reflection. Do something for yourself to put you in a better place for the others in your life.

The Effect of Relaxation Response Training on Stress, Anxiety and Self-Esteem in 2007-08 Jewel-on-the-Hill High School Students

Description

Our project goal was to examine the psychological and behavioral effects of the Benson-Henry Institute’s (BHI) relaxation response based stress management curriculum on junior students at Jewel-on-the-Hill High School. This curriculum was offered to Jewel-on-the-Hill High School junior and sophomores. The training consisted of 8 twice weekly 45 minute relaxation response curriculum sessions provided by the BHI Education Initiative which focused on learning and practicing elicitation of the relaxation response through meditation, breath focus, progressive muscle relaxation, imagery/visualization and yoga. In addition, students were taught skills in mindfulness, tackling negative thinking, and positive psychology.

Results

60 11th graders enrolled in the study and completed the baseline survey and 42 (70% of enrollees) completed a survey after the program was completed. After the program was completed, students reported significantly lower stress and anxiety and higher levels of spiritual growth and physical activity. They also reported a gain in stress management abilities. Students also filled out some open-ended questions about the program. They said that they enjoyed learning/practicing relaxation techniques, identifying cognitive distortions, and setting aside time to relax.

Future Directions

Due to the success of the intervention we plan to conduct a randomized trial for the 2008-09 school year with sophomore students at Jewel-on-the-Hill High School. Students will receive an 8-session training in one of two groups. We will be abbreviating the student questionnaire but will be adding coded data—to ensure confidentiality—from the school records on students’ grades and absenteeism.
Appendix K

Data Collection Instruments

Instrument 1 Interview Questions (I1)
Pre-Intervention

PIQ 1 - MQ-I1d) What do you see as your role as a member of this committee?

PIQ 2 - RQ4-I1) What results would you ideally like to see by the end of next year’s work?

PIQ 3 - RQ1-I1a) What are your assumptions about what the results of this committee’s work will be by the end of next year?

PIQ 4 - RQ1-I1b) How do you define the student stress problem; what are the contributors and scope of the issue?

PIQ 5 - RQ1-I1c) What techniques have you found successful in managing your own stress levels?

PIQ 6 - RQ2-I1) What challenges do you think the Committee will encounter during this work?

PIQ 7 - RQ3-I1) What do you expect the school to learn from this work? What do you expect to learn from this work?

PIQ 8 - MQ-I1a) How open do you feel the teachers are to the student stress issue. What kinds of changes in teachers’ behavior and practices will be necessary to make meaningful progress on the problem?

PIQ 9 - MQ-I1b) How open do you feel the students are to the student stress issue; What kinds of changes in students’ behavior and practices will be necessary to make meaningful progress on the problem?

PIQ 10 - MQ-I1c) How open do you feel the parents are to the student stress issue; What kinds of changes in parental behavior and practices will be necessary to make meaningful progress on the problem?
Instrument 2 Participant Journaling Questions (I2)

Administration: Fall, Spring
Participants: three teachers, three students, two parents

Instructions: In an effort to gather further information on the following research questions, I ask that you answer the following prompts to the extent that you can:

(1) How did the Stress Reduction Committee analyze and name the student stress problem?
(2) What were the challenges encountered by the faculty, parent, and student members of the committee during its work on the student stress problem?
(3) What were the new learnings of the committee during its work on the student stress problem?
(4) What were the school-wide results of the initial phase of the Project?

Name: Date:

RJQ1–RQ1–I2) During your involvement in the Stress Reduction Committee, do you find yourself looking at the stress problem any differently than when you first joined the committee? If so, why might that be the case?

RJQ2–RQ2–I2) What challenges have you faced personally or observed during the Stress Reduction Committee’s work on addressing the student stress problem?

RJQ3–RQ3–I2) What have you learned during your involvement on the Stress Reduction Committee?

RJQ4–RQ4–I2) What progress, if any, do you believe the Stress Reduction Committee is making on addressing the student stress problem? (List specific examples, if possible)

RJQ5–RQ4–I2) What factors have led to this progress?

RJQ6–MQ–I2) How would you rate your level of interest and engagement in the stress initiative at this point in time? (choose between high, moderate, and low) Why did you choose the rating of interest and engagement?
Instrument 4 Researcher Reflective Journaling (I4)

LPJ1) What specific elements or actions relate to the Project (e.g. meetings)?

LPJ2) What sort of progress are we making on the Project (evidence)?

LPJ3) What am I learning regarding the process of the Project?

LPJ4) What am I learning regarding substance of Project (i.e. theoretical landscape)?

LPJ5 What am I learning about my leadership and mutuality (use examples)?
Instrument 5 Interview Questions (I5)
Post-Intervention

PostIQ 1 - RQ1-I5) How do you define the student stress problem now? Did this definition change over the course of the year?

PostIQ 2 – RQ2-I5) What were the biggest challenges for the Committee? What will be the biggest challenges going forward in this work?

PostIQ 3 – RQ2-I5) How open do you feel the teachers are to the student stress issue? Will they be willing to change their choices or behaviors to make a difference?

PostIQ 4 – RQ2-I5) How open do you feel the students are to the student stress issue? Will they be willing to change their choices or behaviors to make a difference?

PostIQ 5 – RQ2-I5) How open do you feel the parents are to the student stress issue? Will they be willing to change their choices or behaviors to make a difference?

PostIQ 6 – RQ3-I5) What did you learn from your participation on the Committee?