How Self-Efficacy is Perceived by Urban High School Students

Patricia A. DeCoster
University of Connecticut - Storrs, patsail62@gmail.com

Follow this and additional works at: http://digitalcommons.uconn.edu/dissertations

Recommended Citation
http://digitalcommons.uconn.edu/dissertations/1354
How Self-Efficacy is Perceived by Urban High School Students

Patricia Ann DeCoster, EdD

University of Connecticut, 2017

Academic self-efficacy, an individual’s judgement of his or her capacity to perform specific academic tasks, is described through a phenomenological study using interview, field notes and survey data. Academic self-efficacy is a main driver of motivation, stamina and resilience, qualities especially necessary within urban settings. The problem of practice is framed within the context of recent urban secondary structural reforms efforts to increase understanding of how students perceive their own self-efficacy as many studies in this area have been quantitative in nature and based on outcome indicators such as grades, attendance and graduation rates. Using a mixed methods convergent design, the data was used to extract four emergent themes that students identified as having a positive or negative impact on their academic self-efficacy. The implications for school and district leadership are discussed in light of these findings with specific attention to the collection and use phenomenological data within urban schools to improve instruction and school climate.
How Academic Self-Efficacy is Perceived by Urban High School Students

Patricia Ann DeCoster,

B.A. Occidental College 1982

M.A. Occidental College 1986

6th Year Sacred Heart University 2003

A Dissertation

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

at the
University of Connecticut

2017
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

APPROVAL PAGE

Doctor of Education Dissertation

How Self-Efficacy is Perceived by Urban High School Students

Presented by

Patricia DeCoste, B.A., M.A.

Major Advisor ______________________________________________________

Casey Cobb

Associate Advisor ________________________________________________

Sarah Woulfin

Associate Advisor ________________________________________________

Kimberly Lechasseur

University of Connecticut

2017
I would like to dedicate this work to my late Grandmother, Alma E. Thoene, a lifelong educator who was devoted to her students. My grandmother not only made my own education possible but introduced me to the world of literature, art and music. Most importantly, she supported and believed in my abilities. By her example I have had the courage to try new experiences throughout my whole life. Thank you.
Acknowledgements

There are so many people that I wish to thank who made this study possible. Firstly, my wonderful sons, Andrew and Tim. Thank you for giving me the courage to continue and loving understanding throughout all the stress and hectic schedules that were involved. Also, my circle of “woman friends” who were always asking how it was going and when it would be done. I am grateful for the talents of Mary Dern-Walker, Diane Strever, Noel Martin and Norma Burnich for providing editing and Spanish translation services. I would like to thank all the administrators, teachers and secretaries at Platt Technical High School, Stratford High School and Ansonia High School for arranging my many early departures for classes or research and providing coverage for my duties as well as their encouragement and support throughout the process. At Kolbe Cathedral High School I would like to thank the Principal, Henry Rondon, as well as the wonderful staff and students that participated in the research to make this study possible. Dr. Sarah Woulfin, who introduced my very quantitative mind to the value of qualitative research and Dr. Kimberly LaChasseur for sharing my passion for social justice as well as expanding my understanding of its impacts on education. My advisor, Dr. Casey Cobb, provided continued support throughout my program, giving valued advice along the way. Ms. Lisa Nesbitt helped me wade through the many necessary forms and procedures. Lastly, I would never have completed my course of studies without the remarkable and talented individuals that shared my cohort; Julie, Michael, Bob, Catherine, Kwasi, Angela, David and Darcy. We shared our lives, laughing and crying together, through our studies as well as those personally challenging times.
### Table of Contents

Dedication ......................................................................... iv

Acknowledgements ............................................................. v

Problem Statement .............................................................. 1

Literature Review and Conceptual Framework ...................... 4

Research Questions ............................................................. 9

Methodology
  Rationale ............................................................................ 9
  Assumptions ....................................................................... 10
  Setting ............................................................................... 10
  Participants ......................................................................... 11
  Subjectivity Statement ....................................................... 12
  Data Collection .................................................................... 13
    Focus Group Interviews .................................................... 14
    Field Notes ......................................................................... 16
    Pre/Post Task Survey ....................................................... 17

Data Analysis
  Surveys ............................................................................... 19
  Interview and Field Notes ............................................... 20

Findings
  Clustered meanings and emergent themes ......................... 21

Discussion and interpretation .............................................. 38

Implications for Leadership Practice .................................. 41

References ........................................................................... 45

Appendix A Methodology Relation to Findings Graphic ............ 50
Appendix B Interview Protocol .............................................. 51
Appendix C Field Notes Sample ............................................ 54
Appendix D Survey Questions and Data ............................... 58
Appendix E Initial and Structural Codes and Frequencies ...... 61
Appendix F Code Co-occurrence matrix ............................... 62
Appendix G Media vs Code Matrix ....................................... 64
Appendix H Statements that are coded for both high efficacy and meeting one’s own expectations............................65
Problem Statement

The need for change is great within urban secondary schools throughout the United States. Urban high school graduation rates hover at only 53%; many students upon graduation are not considered ready for college or careers and the income gap is only widening for those with or without a college degree (Alexander, 2011; Council, 2003; Darling-Hammond, 2006). In response to these concerns, a myriad of reforms have been thrust upon secondary schools in the past three decades, many involving the creation of smaller high schools that are focused on specific areas of study or college preparation. These choices include schools that focus on early college experiences, and blended on-line learning, schools with career themes and charter schools. The main intention behind these reforms is to make learning more personalized and school communities more responsive to student needs (Borman, 2005; Toch, 2003).

In addition to these structural changes, learning opportunities are becoming much more self-directed. The Internet allows students to have access to the best libraries, museums and multimedia instruction regardless of the schools they are attending (Bandura, 2006). The Common Core State Standards also support the development of skills that require a high degree of agency such as evaluation of evidence, explanation of various points of view and constructing well-reasoned arguments. In short, students must “become self-directed learners, effectively seeking out and using resources to assist them, including teachers, peers, and print and digital reference materials” (Common Core State Standards Initiative, 2016). Bandura (2006) states that “This shift in locus of initiative involves a major reorientation in students’ conception of education. They are agents of their own learning, not just recipients of information” (p. 10).

These reforms directly depend upon one of the major drivers of learning: student self-efficacy (Bandura, 1989; Howard, 1995). Studies have shown that academic self-efficacy is closely linked to academic success, self-esteem and school satisfaction (Barrett, 2003; Pajares,
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

2006; Schunk & Miller, 2002). As Zimmerman and Cleary (2006) summarized from numerous studies, students with a high degree of self-efficacy are “more engaged in the activity, work harder, and sustain high levels of effort even when obstacles are encountered”. During middle and high school students are expected to increase their skills in the areas of goal setting, strategic planning and critical self-evaluation making self-efficacy an even more essential quality (Zimmerman & Cleary, 2006).

Recent investment in educational reform begs the question of whether we are making changes that reach the underlying factors that affect student learning. Several studies from Australia and New Zealand have shown that student and teacher perceptions of classroom environments, as well as other factors that affect learning, can differ significantly from each other (Fraser & Fisher, 1983; Peterson, Brown, & Irving, 2010). Therefore, without asking students directly how they perceive their learning experiences, educators may make policy decisions that either do not improve or adversely affect learning. Unfortunately, few studies within the United States have used interviews to investigate how students perceive their own learning (Campbell et al., 2001), and even fewer occur within the context of small urban high schools (Maroulis & Gomez, 2008). The measures of student success that are primarily used in the U.S. include grades, standardized test scores, graduation rates and disciplinary data (Rumberger & Palardy, 2005). Although these external indicators can reflect the ability of students to self-regulate behavior, persist at difficult tasks and realistically self-assess performance failures, they do not directly access self-efficacy which is the internal factor influencing these qualities. (Bandura, 2006; Pajares, 1996; Schunk D. H., 1991).

A mixed methods study combining a phenomenological
approach to interpreting qualitative data along with the use of pre/post task survey questions allows student self-efficacy to be described through the voices of the students themselves within a small, urban high school. Qualitative research designs provide a “powerful understanding of subjective experience...cutting through the clutter of taken for granted assumptions and conventional wisdom” (Lester, 1999, p. 1). By discovering the clustered meanings or emergent themes of student self-efficacy, as the students themselves describe them, educational leaders may gain a better understanding of how students perceive their own learning thereby improving instructional and curricular supports which can increase the educational conditions for increased academic self-efficacy.

Leaders of schools have a vested interest in evaluating the self-efficacy of not only their teachers but also their students. Those students that feel they have a chance to succeed are much more likely to display the qualities of persistence, effort and resilience (Pajares, Self Efficacy Beliefs in Academic Settings, 1996). As self-efficacy is both task- and context-specific, such studies can give educational leaders specific indicators for change in the areas of school climate and instructional strategies. Understanding student perceptions of self-efficacy can lead to better predictors of student academic success than standardized tests or grades (Pajares, 1996).
Literature Review and Conceptual Framework

Albert Bandura (1989) argued that self-efficacy, which he defined as the belief that human agency can influence successful outcomes for task completion, was central to acquiring new skills and learning. Social cognitive theory takes on an agentic perspective to change, development and adaptation (Bandura, 1989). Bandura describes an agent as someone who intentionally influences one’s functioning and life circumstances stating that, “In this view, people are self-organizing, proactive, self-regulating, and self-reflecting. They are contributors to their life circumstances not just products of them” (2005, p. 3).

Within the framework of social cognitive theory, self-efficacy is one of five core interdependent concepts. The other remaining core concepts include observational learning/modeling, outcome expectations, goal setting and self-regulation (Bandura, 1989; Pajares, 1996). Although all of these concepts are interrelated and interact with each other, self-efficacy can be distinguished from the other core concepts of social cognitive theory by being task and contextually specific, focusing on an individual student’s attitude in light of specific goals (Bandura, 1989; Pajares, 1996). Therefore, efficacy is involved in both cognitive and motivational processes central to learning, allowing students to “remain task oriented in the face of judgmental failures” (Bandura, 1989, p. 1176).

Self-efficacy is also associated with setting and achieving personal goals as well as the ability to realistically self-assess performance failures (Bandura, 1989; Howard, 1995). These are attributes essential to academic success, especially for urban students that have multiple challenges for success in school. It is well established that many urban students display reduced resiliency and goal-setting ability as a result of limited available economic and social capital (Borman & Overman, 2004; Schunk, 1991). Specifically, self-efficacy has been linked to
academic achievement in reading, writing and mathematics (Pajares, 1996). Multon et al. (1991) conducted a meta-analysis of how self-efficacy beliefs impacted academic achievement and found that it had an overall effect size of 0.38 accounting for 14% of the overall variance in academic performance as cited by Zimmerman and Cleary (2006).

Mastery experiences, vicarious experiences, social persuasion and affective states all inform perceptions of self-efficacy (Bandura, 1997). However, studies have shown that mastery experiences have the greatest single influence on self-efficacy beliefs (Schunk & Meece, 2006). Self-efficacy is part of Bandura’s triadic determinism theory, see figure 1 below, in which personal, behavioral and environmental factors all interact to affect one’s self-perception (Bandura, 1989).

**Figure 1 Factors affecting self-perception**

![Model of Bandura's Triadic Determinism Theory](image)

Those individuals with low self-efficacy are more likely to perceive tasks and goals as too difficult to achieve, causing stress and depression, while high self-efficacy leads to an increased sense of confidence when approaching difficult tasks (Pajares, 1996).

Developmentally, adolescents are experiencing rapid changes both socially and physiologically. Studies show that as the pre-frontal cortex, the seat of executive function, begins to mature students’ self-perceptions begin to become “more abstract, multidimensional and
hierarchical” (Schunk & Meece, 2006, p. 77). As students enter middle school and, later, high school, the degree of self-regulation, including goal setting, help seeking, organization, time management and immediate gratification delay become critical to success in an academic environment that includes multiple teachers and expectations, more academic rigor, as well as more work to be completed outside of school hours (Zimmerman & Cleary, 2006). Schunk and Meece (2006) showed that in some cases students’ self-perception of competency is reduced by seventh grade, especially in the area of mathematics, often continuing into high school. Additionally, students perceived that their learning environment in elementary school was more focused on mastery learning whereas this focus quickly changed to competition and individual ability comparisons in middle school (Schunk & Meece, 2006). In secondary education, adolescent students’ sense of self-efficacy becomes more influenced by the success or failures of their peer group (Schunk & Miller, 2002). Zimmerman and Cleary (2006) point out that as prior performance is the single most important predictor of self-efficacy, failure to increase self-regulatory behaviors at this juncture can lead to an academic downward spiral.

Urban reform at the high school level has attempted to address climate, curriculum and instructional concerns by emphasizing academic relevance, increasing rigor and fostering personal relationships as central to creating a positive learning environment (Rudlud, 2005). At the national level, both the National Association of Secondary School Principals (Rudlud, 2005) and the National Research Council (Council, 2003) have published position papers encouraging the creation of smaller, theme-based high schools to improve academic rigor, curricular relevancy and more personalized school environments. In response Connecticut has enacted the Connecticut Secondary Reform Plan (SDE, 2009) and the Educational Reform Act (SDE, 2012), which emphasize the role of personalizing instruction, making students college and career ready.
as well as increasing the number of educational options that high school students can choose from, including vocational and agricultural programs. Urban school districts such as Hartford, New Haven and Bridgeport (Valles, 2012) have moved in this direction by creating smaller, theme-based high schools in response to these legislative initiatives. These reforms have increased our need to understand how students experience their own academic self-efficacy so that instruction, curriculum, support services and structural design can be optimized to provide a climate and environment to support adolescent development.

Most research on self-efficacy has used quantitative methods (Schunk D. H., 1991). Schunk recognized that qualitative studies are also needed to “broaden from reliance on numerical scales” (1991, p. 228). He noted that there is “an urgent need for self-efficacy research conducted in classrooms using teachers and academic content as students are learning rather than simply performing tasks” (Schunk D. H., 1991, p. 227).” The hope of this study is to improve our understanding of the perception of self-efficacy by students within the context of a small urban high school.

Despite the emphasis on creating smaller personalized learning environments within these urban high schools, few studies within the United States have used interviews to find how students relate to their learning (Campbell et al., 2001), and even fewer occur within the context of small urban high schools (Maroulis & Gomez, 2008). The measures of student success are primarily based on outcome indicators such as grades, standardized test scores, graduation rates and disciplinary data (Rumberger & Palardy, 2005). These are external measures of success reflect the ability of students to self-regulate behavior, persist at difficult tasks and realistically self-assess performance failures, qualities that begin with a sense of high self-efficacy (Pajares, 1996). However, intrinsic factors of student success such as self-esteem, self-efficacy and
motivation are more difficult to measure. Students are seldom asked how they perceive their own ability to learn or if they find that their schools meet their expectations and needs.

This is in contrast with other countries where self-efficacy has been used extensively as a measure of studying effective instructional practice and individual classroom environments (Motlagh, 2011). Peterson, Brown and Irving have pointed out that while policy and curriculum may be designed to “encourage or promote certain conceptions of learning, the way students may perceive these learning environments may be different” (2010, p. 168). Some studies within the United States have examined affective factors related to learning; however, these studies are also primarily quantitative, focusing on the realm of student engagement (Research Educational Laboratory (REL) Southeast, 2011) by using teacher and student survey instruments that examine classroom behavior and, to a lesser extent, the attitudes of students (Fraser & Fisher, 1983; Lee & Smith, 1995). These studies do not allow students to express their experiences in their own words but rather respond to surveys constructed within a predetermined set of parameters that rely on specific assumptions and frameworks. Most studies focus on achievement data, usually restricted to state standardized tests, as the only yardstick for success. These approaches to inquiry, while valuable, are limited in their capacity to understand the conditions to optimize student academic self-efficacy. Interpretivist paradigms of inquiry are more consistent with my perspective on learning, which I believe is constructed from individualized, real-world experiences and is influenced strongly by the development of social skills.
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

Research Questions

Overarching Research Question

How is Academic Self-Efficacy Perceived by High School Students within a Small Urban High School?

Sub-Questions

A. What personal characteristics do urban high school students associate with their own academic success?

B. What resources outside of their high school do urban high school students believe that they need to achieve academic success?

C. How do social resources promote academic self-efficacy?

Methods

Rationale

The importance of student voice in explaining how students perceive their own ability to learn is at the core of my problem of practice. A mixed method study allows for a rich description of student self-efficacy, through the lens of social cognitive theory, by using interview, observational and survey data. A convergent data analysis collects and analyzes the quantitative and qualitative data separately to merge the results into a coherent set of findings, which describe student experience (Creswell, 2015, p. 51) (See Appendix A for graphic relating methodology to findings). To capture students’ experiences, I have chosen to use a mix methods study combining a qualitative phenomenological approach to describe the essential meanings of self-efficacy for a small focus group of high school students as well as a broader view of student interactions within the context of classroom field observations. Additionally, a quantitative survey based on the commonly used Self-Efficacy Scale of the Motivated Strategies for Learning
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

Questionnaire (MSLQ) (Bong, 2002) captures student perception of self-efficacy immediately before and after they perform specific academic tasks. Many studies (Zimmerman B., 1989, Pajares, 1996) utilize surveys before and after task completion, which Bandura referred to as “bookending” (1989, p. 67), providing temporal proximity to the task is important for recall and to establish the relationship between the degree and type of self-efficacy experienced by the student. Bandura argued that “[t]he relation between efficacy beliefs and action is revealed most accurately when they are measured in close temporal proximity. The closer the time, the better the test of causation” (1995, p. 67). Survey results are merged with the qualitative data to establish how students perceive their own self-efficacy relative to specific tasks. After the process of reduction by bracketing and coding the raw interview and observational data, common themes and essential understandings (Hycner, 1985) pertinent to the research questions are identified. By conducting a phenomenological study, my goal is to construct a rich description, the “lived experiences” (Hycner, 1985), of students’ academic self-efficacy (Creswell, 1998, p. 51; Patton, 2002).

Assumptions

In construction of this study, a number of assumptions, supported by prior research, are made. First, student self-efficacy directly affects academic achievement through increased persistence and effort (Borman, 1986; Howard, 1995; Motlagh, 2011). Second, reduced school size and a positive climate improve attitudes toward learning (Darling-Hammond, 2010). Lastly, students are willing to share their opinions honestly in front of their peers in a focus group setting (Byrne, Hattie, & Fraser, 2001).
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

Setting

A small, urban, private Catholic high school\(^1\) was chosen for this study because the administration and staff were able to accommodate the scheduling of interviews within the school day and student volunteers were willing to participate. I initially sought and successfully gained IRB approval and acquired superintendent approval in two nearby large urban public districts, however the study could not be conducted due to staffing and scheduling difficulties encountered within these districts. The study site is a racially diverse, college preparatory school enrolling over 300 students from grades 9-12. The student body is 50% African American, 34% Hispanic, 3% White, and 14% mixed/other identified. (New England Association of Schools and Colleges, 2009) This is a Title 1 school with 45% of the students qualifying for free or reduced lunch (New England Association of Schools and Colleges, 2009). Over 60% of the students are receiving partial or full scholarship aid for tuition. Fifty percent of the students are Catholic and over 90% of the students reside within the city limits of this school (ABC School Website, 2016). The school itself is located in the heart of the city within an area of mixed housing and business use. Most students in class of 2014 were accepted into colleges (88% accepted to four-year colleges and 11% at two-year colleges). (ABC School Website, 2016).

The curriculum at ABC School is college preparatory and traditional. Students are expected to take four years of English, social studies, religion and math along with three years of science (ABC School Website, 2016). The schedule is a four-by-four modified block schedule with students taking four full year courses each semester.

Participants

Initially, I visited all the 11\(^{th}\) grade social study classes to introduce the myself as well as the study. Students received both informational brochures and permission forms both in Spanish

\(^1\) referred to as ABC school for the purposes of this paper
and English in these classes. Students could ask questions during the recruitment phase of the study via e-mail. Those students interested in participating turned their signed forms into the main office. After two weeks, fifteen students had volunteered for the study and all were accepted. Students were in their junior year to allow for the most mature reflection on the experience of learning while avoiding the stresses associated with senior year. One student chose not to participate after the first interview, and that student’s data was not used for this study, leaving fourteen study participants for final data analysis. The students participating were representative of the junior class as a whole:

Table 1. Participant vs. Junior Class demographic comparison

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Number</th>
<th>F/R Lunch</th>
<th>Female</th>
<th>Male</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Group</td>
<td>14</td>
<td>43</td>
<td>57</td>
<td>43</td>
<td>14</td>
<td>43</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>11th Grade</td>
<td>77</td>
<td>45</td>
<td>53</td>
<td>47</td>
<td>3</td>
<td>50</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-2</td>
<td>-4</td>
<td>11</td>
<td>-7</td>
<td>-2</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Subjectivity Statement**

Both as a student and as an educator I have had extensive experience in urban schools. During my time as a teacher in Los Angeles, and Vallejo, California, as well as Stamford, Bridgeport, Stratford and Ansonia Connecticut, I have found that my most challenging students are often the ones that are unable to imagine themselves as successful at learning. In my experience, persistence and the ability to accurately self-assess after initial failure are the ingredients for success. My initial interest in self-efficacy began during my time at Dolan Middle School in Stamford, Connecticut as an Assistant Principal where I had the opportunity to work with the Efficacy Institute started by Jeff Howard. Teachers and administrators were trained in how to create positive and reinforcing learning environments and use assessment for student self-
reflection so that those conditions that encourage self-efficacy could be maximized. As a constructivist I have a deep regard for how students attempt to make sense of themselves, other people and the world around them. Self-efficacy beliefs are central to how we visualize ourselves and our ability to work, as well as learn, successfully with others.
Data Collection

Data collection through focus group interviews, classroom field notes and individual survey questions provided a variety of qualitative and quantitative data that was used together to elicit essential and clustered meaning statements for the creation of a credible phenomenological description. Verbatim textual data was gathered from interview, classroom observations and student task questionnaires. Focus group interviews generated textual data which reflect group dynamics as students responded to each other’s comments in a group setting. Additional descriptive data relative to physical conditions, number of students, body positions and movements were also collected.

Data collection occurred over a seven-week period, in which each student participated in three focus group interviews. The composition of each focus group varied depending on factors such as scheduling conflicts, student absenteeism and academic testing. Each focus group interview consisted of four to five participants. The administration arranged for interviews to be conducted during class time for periods of 20-40 minutes each as well as providing for times when I could make field notes within individual classes. Field observations were made in English, Algebra II, Physics and AP History classes that contained some of the interview participants. Interviews were conducted in the library without any other students present. Generally, interviews occurred in the mornings, and field observations were made in the afternoon. After completing their tasks students were prompted to complete the efficacy pre-/post-task surveys consisting of five questions (Bong, 2006) through the website Survey Monkey. Students self-selected the tasks such as tests/quizzes, labs and small group activities on which they would be reporting their pre/post task responses. Teachers were not interviewed during this study because describing the phenomena of self-efficacy was restricted to the student
perspective. Four classroom observations occurred, one for each of the major academic classes including English, social studies, science and math. Field notes included direct student quotes and a description of classroom behaviors and environment (Chiseri-Strater & Sunstein, 1997, p. 72). Follow-up questioning during subsequent interviews provided additional opportunities for student self-expression.

Producing an accurate capturing of self-efficacy within a mixed methods study presents a number of challenges in an academic setting. Schunk (1991) noted that:

Efficacy appraisal is an inferential process in which persons weigh and combine the contribution of such personal and situational factors as their perceived ability, the difficulty of the task, the amount of effort expected, amount of external assistance received, number and pattern of successes and failures, their perceived similarity to models, (and) persuader credibility. (p. 208)

It must be recognized that many of these factors cannot be identified individually within the complex interactions of a classroom setting. However, by having students fill out pre and post task questionnaires as well as making classroom observations of these tasks, I was able to gather enough textual data to observe the first three factors that influence self-efficacy: prior successful task completion (mastery experiences), successful or unsuccessful task completion by peers (vicarious experiences) and oral statements of encouragement by persons held in high regard (social persuasion) (Bandura, 1989). Interviewing students within a social context of a focus group provides important data not only about their individual school perceptions of self-efficacy but also about their collective sense of efficacy as a group.
Focus Group Interviews

Students were divided into small focus groups consisting of four to five participants each. Interview data was collected during fall 2015. Each participant was involved in three focus group sessions lasting approximately 20 to 40 minutes each during the academic day, usually in the late morning. (Seidman, 2006, pp. 16-21). (See appendix B for interview protocol) A total of twelve focus group interviews were conducted during seven separate dates over the course of seven weeks. Focus group interviews followed the discussion format and sequence for qualitative studies to gather background information, details of the experience and finally reflection on the learning (Seidman, 2006). I chose to conduct a guided interview for the first session, preselecting certain questions before hand and then moving into a less structured in-depth interview for subsequent sessions (Lichtman, 2006, p. 256). This first interview also allowed for the establishment of norms and the building of rapport between the researcher and participants. This is particularly important in qualitative interpretist studies as trust needs to be established early to allow students to fully share their experiences (Lichtman, 2006, p. 323). After introductions were made, norms were established and the purpose and structure of the study was explained. Students were assured of both the confidential and voluntary nature of the study. During the first interview students shared their prior learning experiences as well as attitudes toward learning along with their perceptions of climate and engagement within the school. The initial interview included questions such as: How do you see your role in learning? Do you think that if you try harder you will earn better grades? The second interview was intended to allow students to describe, in their own words, the learning experience of a specific self-selected task so that textual data could be gathered. Examples of follow-up questions included: What role did your group have in your learning? Do you feel that this classroom experience will help you to succeed with similar tasks
in the future? To collect reflective data (Seidman, 2006, pp. 86-94), the last focus group session centered on asking students what parts of the learning experience most affected their self-efficacy. Subsequent interviews were directly connected to the learning tasks students had selected and/or were observed during field observations. The post-lesson interview examined the role of student and teacher interactions, learning strategies and actual success in completion of the task. Questioning was iterative with students responding to each other as well as prompts from the researcher. Student responses were used to clarify the textual or reflective meanings of statements made. (See Appendix B for Interview Protocol)

Interviews were audio-recorded and transcribed for data analysis. In addition to the audio-recordings, the dictation software Dragon®, Naturally Speaking, was also used in real time. To construct the final transcription, the audio recording was compared with the dictation taken by Naturally Speaking during the interview. The group interviews occurred within a two-week period, allowing for a close association between the classroom task and the reflection on learning by the students.

Field Notes

Classroom observations occurred on four occasions, once in each of the four core academic classes (English, math, social studies and science) in which participating students were enrolled. The teachers were informed beforehand of the purpose for the observation and were enthusiastic regarding the purpose of the study. Teachers did not know beforehand exactly which classes would be observed to keep classroom routines as normal as possible. I took detailed field notes using sketches of the classroom as well as descriptions of student and teacher behavior including direct quotes (Lichtman, 2006, p. 356; Mack, Woodsong, MacQueen, Guest, & Namey, 2005, p. 24) (see Appendix C for a sample of field notes). This form of note taking
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

included verbatim quotes from students and teachers along with narrative descriptions of student behaviors, teacher instructional strategies and a sketch of the classroom set-up including location and numbering of students, groups and teacher positions throughout the observation. During the lesson I tried to keep interpersonal interactions with students to a minimum. I made notes regarding the general impressions of the classroom shortly after the observations (Chiseri-Strater & Sunstein, 1997).

Individual Student Pre-/Post-task Survey Questions

Individual students were asked specific questions related to their individual perceptions of self-efficacy immediately before and after an academic task. Students responded to a set of five questions before and after the specific task to identify elements that increased or decreased their self-efficacy. These five questions are derived from the 44 questions found in the Self-Efficacy Scale of the Motivated Strategies for Learning Questionnaire (MSLQ) (Bong, 2002). The MSLQ has been extensively used to study the relationship between self-efficacy, motivation, grades and self-regulatory behaviors (Bong, 2006; Duncan & McKeachie, 2005). According to a meta-analysis performed by Crede’ and Phillips (2011) the mean for reliability distribution for the subscale of self-efficacy was 0.91 with a standard deviation of 0.02 based on 21 studies for college students (Crede’ & Phillips, 2011). The MSLQ uses a 1 to 5 Likert scale (see Appendix D for survey questions and raw data tables).

Survey responses were collected via Survey Monkey®. Survey responses were time stamped upon completion so that the proximity of the responses to the time of the task could be compared. In addition, students identified the type of task and class the task was completed in. Students self-selected the tasks that they would be using to answer the questions and most answered for two tasks. Some students (3 of 14) required prompting to answer the post questions,
which were generally done within one week of task completion. Most students completed the questionnaires within the 48-hour period requested for a total of 32 pre/post responses. Students were allowed to select the tasks that they would use to respond to the pre/post task survey questions. Since the students were not all taking the same classes together (for example, some were in AP history while others were in regular history), it would not be possible to assign a specific task for all students to complete uniformly. Most students (59%) chose tests, followed by 29% choosing homework and, lastly, 12% choosing in-class hands-on projects or labs. The selected tasks were mostly performed in social studies (65%), followed by English (18%), math (12%) and science (6%). Two duplicate responses were eliminated along with the responses from the one participant that dropped out of the study. Survey data was downloaded into an excel spreadsheet and disaggregated for gender, question and type of task completed.

Using a mixed methods convergent design, the quantitative data was used to help confirm or support the statements associated with positive and negative self-efficacy statements of specific tasks expressed within the group interviews and classroom observations to increase the inter-reliability of the qualitative data (Creswell, 2015). By using Dedoose the frequency of codes was used to determine the types of statements that occurred most frequently within statements of high and low self-efficacy. Those codes with the highest frequency were compared with the survey result data to see if there were any connections that supported or contradicted these behaviors or efficacy statements.

Data Analysis

Self-efficacy is affected by four principal domains: prior task performance success, vicarious experiences such as observing others’ task successes, persuasion of success by others and physiological responses such as sweating and increased heart rate (Schunk D. H., 1991). Of these domains only the first three were observed within this particular study. Evidence of these
domains were gained through three different sources of student data that include individual responses to pre-/post-task questions, focus group interviews and classroom field notes of teacher and student dialogue and behavior during task completion. By identifying statements of meaning and classifying these into both textual and structural descriptions through the use of coding, the essence of the experience was described (Creswell, Qualitative Inquiry and Research Design, 1998, p. 150).

**Interview and Field Notes**

Interview and observational data (field notes) were analyzed by initially developing codes around core factors (Hycner, 1985) that affect a person’s self-perception of self-efficacy: mastery experiences, vicarious experiences of others and positive reinforcing messages from teachers or peers (Bandura, 1997). (See Appendix E for initial codes and their frequencies) Codes specific to these areas were used to develop common threads that describe the essential meanings that students identified as critical to their ability to learn within their present high school context. Secondary codes (structural codes) were then developed that would extract these more generalized statements of meaning into clusters (Hycner, 1985, p. 284). After initial codes were developed from the first and second interviews, causal codes were then derived from the initial co-occurrence matrix using Dedoose® software. These codes were used to find patterns relative to how students’ understandings of self-efficacy were affected by Bandura’s domains (Bandura, 1997).

Dedoose® software was used to code high and low efficacy statements in the context of causal statements including prior experiences, vicarious experiences and the influence of social context (Bandura, 1989) using clustered meanings taken from individual statements as well as identifying co-occurrence frequencies. (See Appendix F for Co-occurrence matrix) A total of 238
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

excerpts were identified and tagged for a total of 1112 codes, with many excerpts falling into two or more coding categories. These codes were numerically quantified by type as well as by type of individual participant (sorted for gender, race and free/reduced lunch status) so that a detailed description of the experience of self-efficacy could be developed. As the study progressed, interview questions were refined from the first interview to further explore this description relative to the lessons observed. Using field notes, student-teacher and student-student talk was analyzed throughout a single class period including during task completion to identify key statements commonly used during lessons that show student engagement and deepened understanding of content knowledge as well as the expectation that effort and academic achievement are linked. (See Appendix G for media vs code matrix) Subsequent interview questions were modified to probe these connections through individual task descriptions.

Survey

The five pre-/post-task questions that were taken from the MSQL survey developed by Paul Pintrich in 1990 (Duncan & McKeachie, 2005) included:

1. I am confident I will/did receive an excellent grade on this task.
2. I am confident I can/could read the most difficult parts of this task.
3. I am confident I will understand/understood the concepts of this task.
4. I am confident I will master/mastered the skills taught in this class.
5. Considering the difficulty of the course, the teacher and my own skills, I am confident I will do well in this class.

Students responded to these questions by using a 1-5 Likert scale: 1) Not true for me; 2) A little true for me; 3) Somewhat true for me; 4) Mostly true for me; and 5) True for me. The students had the option of adding their own comments about the experience at the end of the survey. Most
(87%) of the surveys were completed within the required 48-hour window before and after the task was performed. The analysis included noting the positive or negative averaged differences between the pre and post responses in response levels (1-5) and analyzed for pre/post task completion trends as well as gender and demographic differences. Comments on the survey were noted within the context of qualitative data to construct essential meanings.

**Findings**

**Clustered Meanings and Emergent Themes**

Four major themes emerged from the analysis of qualitative and quantitative data: 1) Students taking responsibility for their own learning, 2) Students displaying a high degree of self-regulation, 3) Parental support playing an important role in building student self-efficacy, and 4) Students formed tight social networks outside of school to study. Next, I present summary findings and supporting evidence for each theme.

**Students take responsibility for their own learning**

Students held themselves to a very high standard of “success”, taking responsibility and reflecting on their academic success and failures. Jesse\(^2\) summarizes how he felt about his role in learning:

> As far as the learning goes, it’s the responsibility is on you. Cause at the end of the day, my Mom's not gonna do my homework for me. It’s like, it’s me! Like, she’s done with school now. So I got to do it myself. So unless I have a question she can try to help me but it’s on me, not her.

**Focus Group (FG) Interview 11-19-15**

Students were often concerned about how to improve their academic performance. They were usually quick to identify the problem themselves such as this quote from Christine:

---

\(^2\) The names of participants have been changed for confidentiality
For physics, like, I have had an 80 on a test and so I didn't take it well. Because … I know I had to catch up on work and I had to make up work. But I studied really hard the night before. I did alright, okay, good so it is a lot of cramming at the end. Yeah but on the test, the test was hard because I couldn't really do that essay very well.

FG Interview, 10-1-15

Some students had expressed that taking responsibility for their own learning was a more recent change in their attitude towards learning:

Um, like usually in the past I would put all the responsibility on the teacher. It is like, if they didn’t teach it right then it’s not my problem, sorry, and I’m not going to learned it. But recently I have had teachers, I don't necessarily understand it the first time they teach it. So then, I have to go back myself. I have to teach myself, just like okay, I have to take some responsibility now.(using a tone that indicated having a conversation with herself)

Melanie FG Interview 11-19-15

When coding for excerpts, such as those above, for the ability to meet one’s own academic expectations there was a total of 168 coded excerpts during interviews, 85% of these excerpts students stated they did meet their own expectations and 15% stated that they did not. Statements that were coded for both high self-efficacy and positively meeting one’s own expectations occurred a total of 9 times, see Appendix H Table 3 for examples of these types of statements, while there were no corresponding co-occurrences for negative self-efficacy statements and meeting one’s expectations. Survey results also suggest a high degree of confidence for student expectations of their grades for a specific task and for the course as a whole by answering the pre-task questions one (I expect to receive an excellent score for this task) and five (I am confident I will do well in this class) both with a score of 3.64 (averaged from N=14 responses), making most of the responses between “somewhat” and “mostly true” in regards to receiving an excellent grade. These students increased their confidence in their grades for the task and the class as a whole after task completion by 0.23 and 0.49 points respectively.
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

With such high levels of confidence in their academic skills students sometimes felt unable to meet their own expectations of success. During the interviews students expressed that they could meet their own expectations for success in 149 coded excerpts compared to 28 coded excerpts where expressed that they did not meet their own academic expectations for a total of 16% of coded excerpts. It was interesting to note that expressions of remorse or disappointment in one’s own academic performance was stated more frequently by boys (78% of all statements within this category) than the girls (22% of all statements within this category) during the interviews. Manuel summarized how he felt about one of the tests that he had taken:

I was not happy with the test we took this week. Alright, so I when I took the test I was expecting it would be better because last test I did poorly. And then one of my friends told me yesterday, cause I wasn't here yesterday (in) school, that the test was absolutely disastrous! It was not on par with the expectations that were for everybody and I found out this morning, through a teacher before I went to class, that I did not get the grade I expected.

FG Interview 11-13-2015

Survey data also showed this gender difference in confidence between pre and post task questions. Boys (N = 6) were far more confident than girls (N = 8) before doing their tasks, however girls increased in confidence after the tasks were completed, closing the gap between them (see Figure 2 below). The only area in which boys increased their confidence relative to girls was in the skills required for the task (see Figure 3 below). Girls had the same average confidence relative to their skills before and after their tasks, however boys increased their confidence by 0.21 points on a 1-5 point Linkert scale. These findings are supported by a meta-analysis study of 187 papers by Chiungjung Huang (2013) showing that boys in this age bracket displayed greater amounts of self-efficacy in most academic subject areas.
Figure 2 Pre and Post Task Survey Averages by Gender
The degree of self-reflection on learning (metacognition) was most evident during these conversations as students struggled to understand why they did not meet their own academic expectations. Students asked each other, as well as myself, what else they could do in the future to improve their academic performance. “Classes such as Spanish, kind of interfered with my studying for this test. I really want to do well. As a result, I ended up not meeting my expectations for the grade.” (Manuel, FG interview 10-1-15)

These results generally agree with Bandura and Schunk studies which link students with high self-efficacy with having higher academic aspirations and are more focused on self-improvement (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996, Schunk D. H., 1991).
Additionally, high self-efficacy an increase in self-awareness that leads to a greater understanding of causality for negative outcomes (Zimmerman & Cleary, Adolescents' Development of Personal Agency, 2006). In this study both the coding for high self-efficacy statements vs. low self-efficacy statements (38 coded excerpts vs. 19 coded excerpts) as well as the average high scores on the survey questions (3.83 pre-task and 4.16 post-task on a 1-5 scale, 4 = statement of confidence in a specific area was mostly true for them) indicate that students had high self-efficacy within this small group.

Goal setting is an important part of self-regulatory behavior, which is enhanced by high self-efficacy during the forethought phase (Zimmerman & Cleary, Adolescents' Development of Personal Agency, 2006).

**Christopher:** Yeah, cause I went in confident because I study for a lot of hours the day before, so, you know, I'm walked in and I'm ready to do this. And, yeah, I got, like, the grade average I wanted to get. Cause I was aiming for an “A”.

**FG Interview 11-13-15**

As seen in the statement above students were setting very specific goals as well as analyzing their goal attainment. The students’ high efficacious attributes allowed them to complete all three phases of self-regulatory behavior (see figure 4) thus mitigating self-recrimination and increasing self-awareness to analyze their own performances.

Throughout the group interviews students spoke of their challenges to succeed in school but were reluctant to see these as reasons for lowering their high academic expectations for themselves. The challenges ranged included the inability of parents to help them on their homework, lack of transportation options to remain for after school teacher help, taking care of siblings at home after school and the inability of some teachers to effectively instruct their classes.
It's kind of my fault exactly because, um, I didn’t study as much cause Monday I had a really bad pain in my throat and it kind of affected how I was going to study. And plus I was watching my brothers and just didn't… it was just a lot of distraction and I was just going to take the easy way out. Thinking I would [missing word?] just as much information I can but really when I took the test it was a lot of information. I really should probably study before we took the test maybe, hours, maybe until midnight, but I did not have enough time.

Manuel FG Interview 11-13-15

This excerpt demonstrates how most of the students thought about their own academic performance in terms of academic expectations. Although most students were able to identify specific challenges they would quickly take responsibility for their academic performance and identify what to do differently in the future. These qualities of critical self-reflection and readjustment in the face of academic difficulties are common in students with high self-efficacy (Zimmerman & Cleary, 2006).

What personal characteristics do urban high school students associate with their own academic success? Reviewing the focus group interviews as a whole the qualities of persistence, self-reflection and self-reliance are seen again and again. Given the self-identified difficulties with time management, including family child-care responsibilities and after school jobs, as well as the limited resources students felt were available to them, very few used these as reasons for negative academic performance. Instead most students reporting negative academic performance, five of the fourteen participants, quickly examined their performance and found that they could improve in some concrete way. Those that were able to meet their own expectations, eight of the fourteen participants, stated that they were generally not surprised by their success and were, again, able to identify specific behaviors that led to their positive academic achievements. These qualities fall into the fore-thought phase and reflection phase of self-regulation (see figure 4, p. 37) and will be discussed further later in the discussion section. These statement along with the
generally high scores, 3.5-4.5 on a Linkert scale of 1-5, on the survey questions point to a high
degree of agency within this particular group of students.

**Students displaying a high degree of self-regulatory behaviors**

Self-regulated learning is strongly associated with high academic self-efficacy (Zimmerman &
Cleary, Adolescents’ Development of Personal Agency, 2006). Zimmerman defines self-
regulated learning as involving “the use of specified strategies to achieve academic goals on the
basis of self-efficacy perceptions” (1989). Specific strategies that Zimmerman(1989) refers to as
self-regulatory include organizing and transforming information, creating routines, self-
consequating (determining rewards or punishments for self-set goals), finding information
independently, memorizing and rehearsing or practicing. Self-regulatory behavior and statements
by students noting such behavior was coded for a total of 357 times throughout both focus group
interviews and classroom field notes, the highest number of within the five domains of behaviors
associated with self-efficacy (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Student self-
reported behaviors of self-regulated learning, such as time management and material
organization, co-occurred 41 times in relation with codes for high self-efficacy during the
interview process. Students usually described the behavior and explained how these strategies
enabled them to succeed academically. Several students described how they set up their learning
environments at home to more effectively study.

**Matteo:** Like, you got, I think, to take this class (physics) seriously so ... Just of the hours
of just studying with no distractions, no breaks. It was just studying.
**Interviewer:** Where did you study? At home? here?
**Matteo:** Yeah, at home. I have my own desk for studying.

---

FG Interview 11-13-15

Students identified specific learning strategies for study that best suited their learning styles.
Melanie: For my test, if I have to study for a test I look over my notes. But reading it doesn’t really help me so I have to rewrite everything over again.

Interviewer: So you recopy your notes? Is that what you do? (student affirms this with a nod) Do you change the format of the notes when you recopy them?

Melanie: Um, I do, I do so I can memorize it easier. ...I just do it kinda like my own way. Sometimes I do like little doodles, like, drawings, stuff like that, that’s how I remember.

Interviewer: So the drawings help you to remember?

Melanie: Yeah, the drawings help me to remember. FG Interview 10-21-15

Repetition and practice were also described by students with high levels of self-regulatory behaviors.

So I went home and, you know, we have different formulas and stuff that we have to do so, basically, it was science and math. The only way you can learn it is to practice, practice, practice, so that stuff is basically what I did and I ended up, we checked it the next day and I ended up getting them right! Deijah: FG Interview 11-2-15

Many students described specific routines when asked how they studied. The level of detail that Matteo uses in the following quote is a good example of this:

Yeah, um, so I first I watch the videos that go over each chapter and then listen to music as I read over the textbook. FG Interview 11-13-15

These students had found specific self-regulatory behaviors that allowed them to be successful in their academics.

Students also recognized when they needed to improve their regulatory skills. Time management was mentioned 29 times during the focus group interviews, with 17 of these statements centered on students being concerned about their need to improve their time management skills. The organization of materials organization, which was coded 43 times in various excerpts, only was mentioned twice as a concern for students. Concern about
organizational skills was expressed with greater frequency by boys (70% of the comments) than girls. Manuel summarizes the challenge of time management expressed by several of the boys during one focus group interviews:

Sometimes I have a tendency to not study like weeks prior. I usually study, maybe, the day before and I don't take enough, I don't start enough hours, which is a big problem. Sometimes I distract myself with many things which take up the time I was supposed to and that’s major problem for me because that’s how that (a low grade discussed earlier) came to be.

Manuel FG Interview 11-13-15

Within this quote we see that the student clearly identifies and takes ownership of the problem, associating the behavior with a specific academic outcome. Each of these student statements used these time management challenges to reflect on future improvement rather than excuses for negative academic achievement, displaying the high degree of agency commonly found with self-efficacy (Bandura, 2006).

Students may have found these self-regulatory behaviors even more critical due to the lack of the resources commonly found in more affluent schools. During the third interview students reflected that they felt they could neither rely on their teachers or parents for extra help if needed. There was a distinct “we are on our own” feel to their discussion at times.

But for me if the teachers present something in a way that I can understand it, I come home and do it myself, that's not an issue. But if you're not presenting it to me in a way that I can understand it and take it home and do her homework or tests or whatever, then I'm not gonna do good! (other students saying “yeah” in the background)

Melanie FG interview 11-19-2015

Often students needed to make special transportation arrangements as parents were not available for late pick-up after school. Student frustration was evident in this quote:
Like this teacher stay after, like, every day to help you. The teacher and I think you can use that but I don't want to stay here, like, every single day. To not understand it! She kind of like, the teachers should help you more in class for you to kind of get it.

Jesse FG interview 11-19-15

There was a real sense of frustration and anger when students felt teachers were not effectively instructing their class. Students actually pounded the table and raised their voices when discussing this topic.

This frustration was compounded by a lack of resources at home. Without other resources some student stated that they felt that if they would be “lost” on their own if they did not understand the material at school. Students were very aware they had opportunities that their parents did not have, making their education a very “high stakes” endeavor.

Your parents are like “what is this?”(laughter) “I haven’t learned this in 15 years” You never learned this!(laughter, applause and affirming responses from other students)

Justin FG Interview 11-2-15

Several expressed the fact that their families would not be able to help them study at home because of their own limited educational backgrounds, but were highly supportive of their efforts. The banter was fast and humorous during this part of the interview. Gabbie comments:

In physics, it's very important to me. Like everything that we do in the class. Because this school is the only place I can get the resources from. Cause, you know, in family you don't really have a group of people know physics and all of that.

FG Interview 11-2-15

Although there is some over-lap with the previous theme of setting high expectations this essential meaning spoke more to the specific behaviors such as time management and organization that allowed academic success to occur that is seen in the performance phase of self-regulation (see figure 4 p. 37). Again the qualities of persistence and self-reliance were evident in these quotes as students struggled to develop the skills that would enable them to
succeed in school. Resources outside of school were scarce and students expressed anxiety about not understanding the material well enough in the limited amount of time they had in class. During our discussions they would ask each other, as well as myself, what other outside resources would be helpful, especially in math and science. It was clear from our conversations that students felt the outside resources necessary for academic success included better transportation options so they could stay for after school help from teachers, better access to technology at home, improved instruction in some classes and the opportunity to have older relatives that could help them with their homework.

**Parental support plays an important role in building student self-efficacy**

Although students felt that they were not able to find academic support at home many stated that their parents provided the emotional support necessary for them to feel self-efficacious. Six of the fourteen participants (four of the boys and two of the girls) referred to their parents as both a source of inspiration and significant motivators towards academic success. As an example, Jose stated that;

> I think one of the things that can really boost me or bring me down a lot is my parents. Like whenever, they see I have an “A-“ they, my mom gave me a big speech and she told me “I know you can do this” and “I know you are better than that”. She told me all this …And all the words that come from her, um, I just really I'm happy to hear that from her and then I'll automatically try to do my best for them and for myself.

-*Jose FG Interview 11-2-15*

Parental support, both in the form of praise for positive academic performance and negative consequences for poor academic performance, was coded for six times during the focus group interviews. Justin expressed a sense of conflict about his mother’s constant pressure to succeed in school.

> My Mom used to help me a lot. Once I got to high school I was, like, you need to stop now and get off my back. … I do my homework she would make me start all over if my
name wasn’t neat enough or I didn't write something neat enough for her, she would just crumple it up and make me write it all over. That is how I would have to learn stuff. I would have to keep writing it over. So I told her I was not doing that no more and I started getting help from peers and we have a lot of study groups. I just read these texts and that helps. 

Interview 1-19-2016

Parental pressure to succeed was felt by most of the students in one form or another that were interviewed. During one interview students related what happens if their grades did not match their parent’s expectations;

Justin: My parent are threatening me. They say “if you don’t come home with straight “A”s we gonna start taking your stuff. Starting with basketball…”

Shaniqua: Oh, no! That’s too much!

Jose: You get the “look”…(making a stern face)

Justin: You know I just walk through the door and just give ‘em the stuff! (group laughter)

FG Interview 11-2-15

Other students had seen their parents struggle to reach their own educational goals and were inspired by their stories.

I am, I'm here for myself because my mom went to school. She did all of this. She is a teacher now. (said with a sense of pride) She has, like, all the stuff under her belt. So my grades don't affect her, they affect me and my goals.

Shaniqua FG interview 11-2-15

These statements are supportive of findings by Bandura and others showing that parental aspirations often negate the influence of socioeconomic status (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). A path analytic study by Bandura et al. (1996) showed the correlation of parental aspirations on both student self-efficacy (path coefficient of 0.15) and academic achievement (path coefficient of 0.35) (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). These results came from a study conducted in a suburban, heterogeneous socioeconomic and majority-white school setting. The present study, in contrast, half of the participants were
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

receiving free or reduced lunch status as well as 50% identified as Black and 42% identified as Hispanic. Parental aspiration has been positively linked to student academic success, regardless of socioeconomic status (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). In this study, students were able to meet parental expectations for academic achievement in 83% of the 41 coded excerpts in the category of meeting/not meeting parental expectations. Most of these statements, like those above, demonstrated that students considered parental approval a significant influence on how they viewed their academic success in this urban school.

Students stated repeatedly how their parents provided examples of hard work and motivation to take school seriously. Several parents had recently received their college degrees, students sharing these stories with obvious pride. By observing these personal struggles some students shared that they were determined, as seen in previous quotes, that they would also succeed through hard work and self-discipline. High parental expectations were a consistent theme throughout the conversations making this one of the most important social resources that allowed these students to increase their self-efficacy.

Students formed tight social networks outside of school to study

Bandura defines social self-efficacy as the belief that one can form tight social bonds and work well within a group (Bandura, 2006). In this study students formed tight bonds with one another even though they did not come from the same neighborhoods and in some cases did not live near the school. In the area of social self-efficacy (Bandura, 2006) 132 coded excerpts from focus group interviews showed a positive interaction with peers in relation to academic behaviors compared to 23 negative interactions in both the interviews and field notes. It should be noted that 60% of the excerpts of negative self-efficacy occurred within classroom whereby focus group discussion resulted in 82% positive self-efficacy statements.
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

Student today have a number of different venues that allow them to exchange ideas and complete cooperative study activities. Studying together through social media was a common theme.

**Matteo:** Yeah, I text my friends when I'm missing something or if they know something that I don't. Cause sometimes the homework it's better to check with other people.

**FG interview 11-13-2015**

Students would help each other academically in many simple ways, such as finding Spanish words for their English vocabulary.

**Jose:** When it was like last year, before finals, and we were studying together and we made up little words to remember so that, … give me a word…

**Female student:** Mercantilism

**Jose:** Mercantilism, we would try to make up a Spanish word for it. So we would remember.

**FG Interview 10-21-15**

Students also observed that studying as a group would help them to concentrate:

I get distracted really, really easily when I am by myself. I do try hard but I do get distracted by anything. And I'll be like “Oh, I'll do it a little later, I'll do it later.” When I'm with people (study group), like, they make me focus. They can get me focused.

**Melanie FG interview 11-19-15**

Socialization within small groups also increased their opportunities to reflect and evaluate validity of ideas:

I like to go over what we did, what we usually do in class and work with other people. You bounce your ideas and like, if your ideas are like a little “iffy” then they’ll like help you straighten them out.

**Jesse FG interview 11-19-15**

Study groups also provided a safe place where students were able to learn different perspectives and challenge each other’s point of view:
I like studying in groups because if you might not know something, somebody else might know it. So it’s basically like what Jesse said. It's like, you know, you can bounce ideas back and forth from each other. Somebody else might have a different perspective on something and you might think it's this way but maybe it's not.

**Deijah FG interview 11-19-15**

Teachers also assigned group work which was completed either on-line or face-to-face:

**Deijah:** It’s cool like we all, like we were in groups and we got assigned a specific chapter so, like, we all got to play each other’s quizzes and stuff.

**Interviewer:** So sometimes you do group work with these kind of sites?

**Deijah:** Ah huh (affirmative). And then our teacher puts all the links together on a Google document so we can all access them.

**FG Interview 10-21-15**

Thereby student groups became an extension of classroom social networks outside of school.

Social networking was, at times, difficult for the students in this study. The school did not provide time in class for students to informally study together and transportation was limited by the schedule of after school buses as well as familial child care responsibilities at home.

**Interviewer:** Now in this school do you get any opportunities to do that in the school or do you have to meet outside of school to do that?

**Several Students:** after school.

**Interviewer:** After school. So, that's not something that is, kind of, like, built into your present classes.

**Melanie:** I mean they give us partner work and stuff like that but not really. For example, like, if you have to study we kinda do it all as a class, okay? Not like “guys, get into a group that would, like, help you”. Stuff like that.

**FG Interview 11-2-15**

These types of comments and field notes taken with classroom seemed to indicate that students wanted more opportunities for self-directed learning within small group settings. During one English classroom lesson students were placed into small groups to organize themselves and present short readings from a Shakespearean play.

**Teacher** – breaks the class into small groups and assigned each group of four students each to a different part of the text. Students reorganize themselves easily. Roles are
quickly assumed. Teacher readjusts two the groups. Energy in the room increases noticeably. Students are more alert and engaged.

**Student 1** – ‘if we do scene one I want to be the gentile woman.’

**Student 1** – takes the leadership role quickly and assigns the other roles to the remaining students in the group.

**Student 4** - writes down the roles

**Student 1** – shows drawings of characters to the other students

**Student 2** - reads aloud to the group the section they are responsible for

Field Notes 10-7-15

This excerpt shows that students were able to organize themselves easily, quickly differentiating roles and responsibilities. Most classes that were observed did not provide opportunities for self-directed learning.

**Interviewer:** So learning from each other seems to be an important piece. Now in this school do you get any opportunities to do that in the school or do you have to meet outside of school to do that?

**Several Students:** After school.

**Interviewer:** After school. So, that's not something that is, kind of, like, built into your present classes?

**Melanie:** I mean they give us partner work and stuff like that but not really. For example, like, if you have to study we kinda do it all as a class, okay? Not like “guys, get into a group that would, like, help you”. Stuff like that.

**Focus Group Interview November 19, 2016**

Overall students independently formed these study groups without the direction or assistance of school staff.

These reinforcing relationships are referred to by Bandura (2006) as “collective agency” (Bandura, 2006, p. 5), where people pool their knowledge, and resources to accomplish something that cannot be done alone. Bandura (2006) found that collective agency “raises people’s vision of what they wish to achieve, enhances motivational commitment to their endeavors, strengthens resilience to adversity, and enhances group accomplishments” (p. 5). Schunk and Meece found that students engaged in groups with high amounts of self-efficacy increased their motivation to succeed in academics throughout a school year (Schunk & Meece,
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

2006). According a ten-year study of several thousand 12 to 16-year-old students by Steinberg, Brown and Dornbush (1996) this positive influence on academic performance peaks in grades 8 and 9 and then slowly declines throughout high school. The 14 students in 11th grade in this study all mentioned that they were in contact with each other regarding academics at some point during our focus group interviews. Students identified again identified access to the internet, transportation options and common time to meet on-line as important resources.

Discussion and Interpretation

So I think also like a really big part is that you believing in yourself. …Like, if you think you're gonna do bad. Well, you’re gonna do bad cause you have that mentality. So you have to believe in yourself.

Shaniqua FG Interview 11-2-15

Much of the findings of this study concur with current research in the area of self-efficacy within the framework of social cognitive theory. The survey results as well as interview and field note codes show a high degree of self-regulation within the group studied. “From a social cognitive perspective, self-regulation has been defined as self-generated thoughts, feelings and actions that are planned and cyclically adapted based on performance feedback to attain self-set goals” stand alone (Zimmerman & Cleary, Adolescents' Development of Personal Agency, 2006, p. 56). Bandura has noted that one of the types of agency associated with self-efficacy is that of intentionality which includes the ability to plan into the future and set goals (2006). Zimmerman and Campillo (Zimmerman & Cleary, 2006, p. 57) developed a three phase process by which self-regulation creates a virtuous cycle of academic improvement (see Figure 4 below). Self-Efficacy plays an important role in the forethought phase of this cycle when students are goal setting and making strategic plans based on their outcome expectations (self-efficacy beliefs).
Firm belief in one’s self-management efficacy provides the staying power. The stronger the students’ perceived efficacy to manage their own learning, the higher their aspirations and accomplishments. (Zimmerman & Bandura, 1994, p. 847)
As noted before these behaviors are becoming ever more critical for student success in the twenty first century as the acquiring knowledge and skills requires learning from more diverse sources and developing career skills that go beyond those provided by traditional high schools. Social context is also critical to supporting positive self-efficacy. Students were adept at using social media to connect with one another as well as using on-line resources to expand their repertoire of learning. However, access to resources such as broadband Internet and transportation continued to present challenges for some of these students. Metacognition can also be seen repeatedly in the self-reflection phase of this cycle explored through the third focus group interviews. The focus group discussion also showed how important relationships were for these students in both their successes and failures in school. They depended on each other for emotional support, new ideas as well as tough evaluation of their own ideas. Families also played an important role in both supporting and providing pressure
for academic success. Students looked critically at their teachers seeing them as important links to their own future success. The most passionate and intense conversations within the focus groups centered on teachers’ behaviors and instructional support. Students showed a surprising sophistication regarding effective educational pedagogy, promoting cooperative and self-directed learning.

Trust of adults was a reoccurring theme as students viewed teachers and administrators, even those they liked and admired, as separate and apart from their own everyday experiences. Often students expressed a “go it alone” attitude that spoke of their conviction that teachers could not be relied upon to provide instruction or understand their life circumstances. Self-reflection was also present in many of our conversations. Academic failures were seen as opportunities to improve rather than indicators that their efforts were futile. Students often turned to me and asked what I thought they could have done differently revealing a trust and openness that was heart-warming. It was during the final interview that students showed an expanding of their own agency concerning academic achievement.

So if you want to study, you know, what you this (sic) you gotta do to get the grades. And along the way there are going to be bumps but you have got to work through them and it’s all for yourself. You depend on yourself. That’s what I am saying.  

Jose FG interview 11-2-15

The high levels of self-efficacy within this self-selected group of juniors attending a small, urban, private, religious high school cannot be generalized as the experience of other students, even within their own school. However, their persistence and constant struggle for a better education for themselves does represent the standard that most educators would yearn to see in their own students.
Implications for Leadership

You need to be able to realize that too. Like, it is like adults and students will telling kids more that you should be in school for yourself. It shouldn't be a punishment to go and learn. It shouldn’t be like going to jail. Like, “I hate going to school.” You may not like to wake up early but you're going there for a reason because you have an advantage to do well in your life. So that is to be emphasized a lot more.

Shaniqua, FG interview 11-2-15

Along with external indicators of success, such as standardized test scores, graduation rates and disciplinary data, educational leaders must remind themselves that these numbers represent real students who have a personal stake in their own futures. Listening to student voice can give us important insights into how students view their own thoughts and perceptions regarding their beliefs in their own ability to succeed. Student focus groups, student involvement in governing structures and surveys to better understand how students perceive their own education are some practical steps to increasing student agency.

Administrators need to be aware that the adults in their students’ lives play an integral role in helping these adolescents to build the self-efficacy necessary to motivate them to do well in school. Teachers, staff and families form a web of important connections which allow students to define who they are. Therefore, building based administrators should make staffing and evaluation decisions with a lens of “how does this person increase the self-efficacy of the students they interact with?” and “will this person increase or decrease student self-efficacy?”. Administrators should ensure that each student has a strong connection to at least one adult in the building. This can be done during a faculty meeting by placing the names of each student on large posters within the meeting room and having teachers/staff place colored stickers next to those students they either have a strong or casual relationship with. Teachers also need to be made aware that building trust is difficult if their socio-economic status is different from their
students and therefore professional development time within small professional learning community type structures to discuss how student’s lives may differ from their own should be provided by administrators. Similarly, parents need to appreciate how influential they are to the success of their children in school. Administrator should promote greater connection to their schools through family nights, school councils, family newsletters and informing parents about the curriculum and methods used within the school. This would allow parents to become active partners in their child’s education. Since personal example and high academic expectations play such an important role for these students any program that fosters and supports strong family units can have a strong, positive influence on student self-efficacy.

Secondly, administrators should support students’ desire to network together to study for specific academic tasks. This would result in the promotion of self-efficacy and increased positive social skills. Field notes and focus group interviews showed that students were able to self-organize themselves using social media outside of school hours to effectively study for college level classes such a AP history but lacked many in-school opportunities to do so. School administrators need to find ways that permit students to utilize time during study halls and lunch periods to allow students to form self-organized study groups within the school day. Both self-regulatory behavior and metacognition was strongly associated with increased levels of self-efficacy, which speaks well to presenting explicit lessons that instruct students to organize themselves while doing complex multi-task projects with the opportunity to reflect on the quality of their efforts and organization afterwards. Content area administrators, such as subject area district directors and department chairs, need to review curricular units to ensure that instruction promotes task oriented group work which allows students to self-organize. Students need to start to learn early, in middle school, that how you learn is as important as what you learn.
These students had many strategies that were making them feel successful but clearly struggled with time management issues as well as prioritization of tasks. Therefore both district and school administrators need to adopt specific programs of study such as the Efficacy Institute or College for All that promote study skills that increase the chances for mastery experience, the single most important factor of self-efficacy, both in the middle school and high school curricula. Reflection and dialogue about learning experiences in the classroom can also be encouraged by educational leaders through PLCs (professional learning communities) and faculty or departmental meetings. Too often tight pacing of the curriculum prevents such important learning opportunities, so district level subject area directors and department chairs should reflect on the actual days of classroom teaching that are available by subtracting the number of mandatory testing days and other “lost” days to school required events. Realistic curricular pacing guides allow for some flexibility and teacher input, encouraging teacher self-efficacy as well.

Another strong message for urban educators is that students may not be able to utilize after school help from teachers or on-line resources as readily as their suburban counterparts. District administrators responsible for transportation and technology should access these needs and work within leadership teams to allow practical, district based solutions. The limited access of internet resources at home has implications for a wide range of curriculum initiatives such as flipped classrooms and blended learning. Student reliance on cell phones and using instant message applications rather than personal computers or even tablets was evident in our discussion. Administrators need to allow teachers and students the educational use of cell phones to increase communication with their students. Mobile friendly platforms such as Google classroom, the Khan Academy and Edmodo should be encourage as an important resource for
student access to learning outside the classroom. Professional development in these areas should include students who often have a clearer understanding of what they need to get off-campus help in their classrooms.

Most importantly, leaders need to be aware of and sensitive to how much urban students view the importance of their own education and their frustrations associated with not having the ability to access the quality of instruction they feel they deserve. Conducting climate surveys and student focus groups within high schools to evaluate how individual teachers and administrators, as well as the school as a whole, are responding to student needs is an important feedback mechanism to have in place. District and school administration need to have a protocol for administration, review and implementation of recommendations developed from this annual survey. Access to surveys, professional development and recommended implementation plans may be accessed through the Connecticut Department of Education School Climate site at http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=321794.

Table 2  Research Questions relation to School and District basesd Leadership

<table>
<thead>
<tr>
<th>Research question</th>
<th>School Leadership Implications</th>
<th>District Leadership Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>What personal characteristics do urban high school students associate with their own academic success?</td>
<td>Principals can increase teacher self-efficacy through both content and pedagogical professional development opportunities, encouraging teachers to use electronic platforms to extend classroom resources, posting exemplars of student work on line and also within the school, forming student focus groups and student involving in</td>
<td>Provide funding and district professional support for school based teacher professional development and analysis of survey data. Provide meeting time and resources for school and district based administrators to discuss best practice and uniform policies regarding the promotion of self-efficacy and the use of survey data to</td>
</tr>
</tbody>
</table>
governing structures to inform strategic school based decisions such as scheduling and curricular changes, provide opportunities for students to learn study and organization skills as well as learning how to set and evaluate personal/academic goals, administering climate surveys to students and staff annually.

| What resources outside of their high school do urban high school students believe that they need to achieve academic success? | Principals can promote increased family involvement with school nights to inform parents or guardians of support skills and community resources, electronic and physical family newsletters, outreach to parents for increased participation on school committees, provide annual parent/guardian and teacher/staff climate surveys (as well as communicate survey findings), teacher communication of classroom expectations and curricula on both educational sites such as Google Classroom and Edmodo as well as on the school website, use of text messaging and social media for communications with families (including frequent updating of mobile numbers). | Districts should develop coherent technology use plans that allow student access to school materials outside of the school grounds. Use of technology within schools needs to be linked with social media and other educational resources such as Google Classroom and Edmodo to provide a seamless educational environment for students. Teachers should be provided with the time and professional development necessary to provide curricular and instructional support through on-line resources so that they are easily available for student who primarily use cell phones for their technology access outside of school. Seek and provide funding for these services. |

| How do social resources promote academic self-efficacy? | Principals should provide professional development regarding the use of social | District curricular leaders can research and select useful on-line resources for subject |
media and electronic platforms such as Google Classroom and Edmodo for teachers as well as encourage teachers to provide in class time for students to become familiar with the use of these resources. Students should be involved in the decisions regarding how electronic classroom platforms are selected and used to maximize their use and effectiveness outside of school.

specific fields to be embedded within electronic classroom platforms. District leaders can provide professional development for school based administrator to promote the use of social media and inform the process of selecting and instituting a uniform district technology use policy.

The process of gaining a better understanding of student self-efficacy will enable leaders to look critically at the structural organization, curriculum and instructional strategies that are used in all high schools. At the district and state levels there are several lessons to be learned from the voices of these students. Those students with high self-efficacy are resilient and reflective, showing a determination to succeed. They are the type of creative problem solvers and flexible thinkers that we are seeking in the twenty first century. The Connecticut State Department of Education initiative to promote school climate training and the use of school climate survey data in all school/district improvement plans is a step in the right direction. Additionally, the State of Connecticut is requiring the inclusion of “soft” indicators of school success such as absenteeism, poverty and access to the arts seen in the new Connecticut Next Generation Accountability System (released on March 2, 2016) (Wentzell, 2016). However, the new plan does not consider internal drivers of learning such as self-efficacy, which can be measured. Districts and schools can implement instruments that measure student and teacher self-efficacy such as the Motivated Strategies for Learning Questionnaire (MSLQ) (Bong, 2006,
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

p. 298), adapted for use in this study, or the Perceptions of Learning Environments Questionnaire (PLEQ) (Devlin, 2002) in high schools. In an age of rapid structural and curricular changes in secondary education, it behooves us to delve deeper into student learning to examine the effect of these changes within districts and individual schools. Further examination is needed where similar school reforms and new instructional strategies are introduced to compare the effect of these changes on student self-efficacy in order to develop effective models for secondary education. Should we not be asking those most affected by these changes, our students, how they perceive these changes on their ability to learn?
HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

References


HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS


HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS


HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS


Appendix A Graph of Methodology and Findings

Convergent Mixed Methods Design (Creswell, 2014, p. 119)

**Qualitative Data**

**Methods**

- Interview and Field Note data
- Three Interviews (Creswell) with focus groups of 3-5 participants
- Field Notes within classroom settings with participants present

**Results**

- Emergent Themes
  - Self-Reliance
  - Self-Regulation
  - Cultural disconnects
  - Parental/family support
  - Forming strong social networks

**Quantitative Data**

**Methods**

- Survey Pre/Post Task
  - Student selected tasks
  - Evaluates self-efficacy immediately before/after task completed on-line
  - Based on Mimi Bong/Bandura survey

**Results**

- Over all high self-efficacy scores ranged from 3.5-4.5 on a 1-5 scale.
- Highest difference between pre and post task was in reading (0.68)
- Lowest difference was in grade prediction

**Merged Results (examples)**

- Students increase self-efficacy after a task
- Male students display greater amount of self-efficacy before but not after task compared to females
Appendix B Interview Protocol

Information Sheet for Self-efficacy Interview Protocol

Principal Investigator: Dr. Casey Cobb
Student: Patricia DeCoster
Title of Study: How Academic Self-Efficacy is Perceived by High School Students within a Small Theme-Based Urban High School?

Focus Group Interview Protocol

Project: Experience of student self-efficacy in learning at a small theme based high school.

Interview #1 (Purpose: introductions, establish norms, explain the purpose of this study, gather background information and establish rapport.) Estimated time: 1 hour 3-4 students present.

Time of interview:
Date/Time:
Place:
Good afternoon/evening. Thank you for taking the time to join our discussion about what affects your confidence in being successful at learning or academic self-efficacy at __INSTITUTION__. My name is Pat DeCoster, and I’m a graduate student at UCONN studying about how students learn in high school. I am conducting research on self-efficacy, or how you perceive your own success at learning specific tasks like assignments or tests. I am here to listen carefully so I can better understand how you experience academic self-efficacy in your school. So I will be asking about what you find helpful or not when you complete specific assignments or tests in your science class. Before we begin, let me suggest some things to make our discussion more productive. Because I’ll be recording for an accurate record, it is important that you speak up and that you only speak one at a time. I don’t want to miss any of your comments. We’ll only use first names here. No reports will link what you say to your name, teacher, or school. In this way, we will maintain your confidentiality. What is confidentiality? (discussion) In addition, I will ask that you also respect the confidentiality of everyone here. Please don’t repeat who said what when you leave this room. I will not be sharing what we discussed specifically with your teachers or the principal. My final report will be about how all the students describe their experiences about their beliefs about learning in a general way, not by naming individuals. During the hour we’ll be here, I will ask you questions, and I will listen to what you have to say. To help us keep to one person talking at a time we will pass around the “talking stick”. You may say as little or as much as you want, or just say “pass” if you choose not to answer a question, it is totally up to you. If you choose not to participate in this study just let me know at any point.
No problem, although I appreciate your time and views, you are here voluntarily. I will not participate in the discussion. So please, feel free to respond to each other and to speak directly to others in the group. We want to hear from all of you but keep all your comments in such a way that no one will be excluded or hurt. I am interested in your viewpoint, common and uncommon experiences. So I may sometimes act as a traffic cop by encouraging someone who has been quiet to talk, or by asking someone to hold off for a few minutes. If it is OK with you, we will turn on the recording device.

Questions 3-7 will be presented and discussed, not necessarily in this order as a conversational tone is necessary to allow individual students to share their lived experiences regarding self-efficacy in a way that will develop a rich and detailed description.

Baseline Questions:
1. What is your first name? Grade? Age?
2. How many years have you attended this high school? What school did you attend before you came here?
4. Do you feel you can learn new things in school easily? Why or why not?
5. Describe how you get prepared for a difficult assignment or test. What do you do and how do you feel about doing it?
6. Describe how your school helps you learn? Describe how your school gets in the way of learning?
7. Is there anything else you would want me to know how you learn new things in this high school?

Interview #2 (Purpose: deepen the description of learning for a specific task, describe an upcoming task that is considered challenging by the student, describe further factors that shape self-efficacy for students prior to learning) 45 minutes – 1 hour
1. Do you have any questions from our last meetings? Any comments?
2. Can you name a specific assignment or test that you succeeded at within the last week and describe how you succeeded? Be specific on what you did and felt before, during and after completing the assignment or test.

This week I would like you to pick one assignment or test that you think might be challenging for you. Have you an idea of one such assignment or test? Immediately before you do the assignment or test I would like you to fill out this survey using either survey monkey or you can send me a hard copy. (show student the survey and how to access it on-line or in paper form and/or pass out return envelopes)
3. What assignment or test is coming up within the next week that you think might be challenging for you? When and in what class will this assignment or test occur? How are you going to prepare for it? What resources will you use? How confident do you feel right now about it?

4. Are there any questions? Is there anything else you would want me to know regarding your self-efficacy in new things in this high school?

Interview #3 (Purpose: Reflect on the role of self-efficacy in performing a specific learning task, describe the task that was completed last week in terms of student self-efficacy, describe further factors that shape self-efficacy for students) 45 minutes – 1 hour

1. Do you have any questions from our last meetings? Any comments?

2. Can you describe the assignment or test that you completed last week? How would you describe the experience? How confident are you that you succeeded in this assignment or test? If you know the grade for this assignment or test were you surprised by it or did it confirm what you thought it would be? If surprised were you happy or not about the actual grade? Why? What factors helped you or made it more difficult? (people, times, conditions etc) Be specific on what you did and felt before, during and after completing the assignment or test.

3. How confident do you feel that you will succeed at a similar assignment or test in the future? Why? What would you do differently, if anything?

4. Do you have any questions or would you like to share anything else regarding your learning experiences?
Appendix C Field notes sample
Field Notes Patricia DeCoster
ABC School
10/7/2015
Junior English Class 12:45-1:35pm

Seating arrangement

Notes T = Teacher S = Students (refer to drawing for # of student)
Observations 19 Students 12 girls/7 boys
Teacher stands at the front
Q & A reviewing Macbeth
Most students are passive. About half are writing notes. Most have bored expressions. The students in the back rows are chatting off topic in low tones. 14/19 OT @ 1:03pm. From board has essential questions and assignments. Students correctly answer questions without much enthusiasm when called upon. All students have books and most have notebooks open. Chatting students #12 & 17.

Teacher moves to the back of the room at 1:06pm. Teacher asks question and student continue to answer. Teacher attempts to redirect the students at 1:07pm T- “who meet up?...I am sorry to cut into your conversation...” Teacher returns to plot .. Malcom and McDoffs. T – “We are on page 499- if you can’t remember”. The room is a comfortable temperature. The windows are open and street noise is audible.

T – summarizes the book. T – “Who wants to volunteer?” Student #4 reads. 15/19 OT. three students in the back are slouched down in their chair. Students in the front are always answering the questions.

T – breaks the class into small groups and assigned each group of four students each to a different part of the text. Students reorganize themselves easily. Roles are quickly assumed. Teacher readjusts two the groups. Energy in the room increases noticeably. Students are more alert and engaged.

S1 – if we do science one I want to be gentile woman.
S1 – takes the leadership role quickly and assigns the other roles to the remaining students in the group.
S4 - writes down the roles
S1 – shows drawings of characters to the other students
S2 “read aloud” to the group the section they are responsible for
T – reads one section of the play to show the emphasis and emotion of the language
S1 – Stands and asks who wants to do what role? (although she had already assigned these roles she seems to have changed her mind)
S1 – becomes impatient about the slow writing of S4..continues to stand and uses hands to point and direct other students
S4 – “why are you going so fast?”
(1:20pm)
Students clarify what the roles and what is included for each.
S5 – “I want to be ______”
S2 – “I want to be ______”
Student notices people out of the window and their attention is distracted.
Students return attention to the task. Students talk back and forth to clarify which scene is to be read and by whom.

Boys talk to each other outside the group about off topic subject.
S1 – “teacher?”
T – “are you still figuring out the parts?”
S1 – “yeah…” looks uncomfortable and eyes are downcast
T – “just start!” voice is irritated
S1 – laughs nervously and begins to read her part
S1 – “I don’t want to read”
1:25pm
Girls giggle
S1 asks T for vocab word definition
Girls giggle again
T – “hold on one second”
S1 “why is she called ‘gentle woman’?”
T – stands and explains. Only two of the five students in the group actively listen
S1 and S3 read and ask about pronunciation
Student help one another and laugh nervously
S5 reads haltingly. Follows the reading with his finger
All other students in the group begin to follow the reading with fingers
1:30pm
Teacher circulates between the groups and makes suggestions to each. The room is noticeably warmer. Students in the back appear sleepy…yawn and stretch periodically.
S5 – student continues to read. Struggling
S1 stands asks “I am reading!” loudly. (seems irritated) other students quiet down.
S4 reads fluently. other students listen attentively.
S2 reads fluently.
S1 – drawing on paper
S5 – correct S1 and then giggles.
S1 moves towards the window
S3 reads a little.
S2 – reads fluently
1:36pm
S1 continues to draw.
Teacher assigns each group with a scene to read for the rest of the class
T “Guys… we need too” I am becoming very tired and hot. Difficult to follow the teacher.
S1 – stands and shows picture of pic to rest of the students. Girls giggle.
Teacher directs stuent to place chairs around a semi-circle
Students rearrange the chairs to organize into “lecture” positions
1:40pm
First group presents. Fours students stand and one student sits in a chair.
Teacher redirects off-task students in the back with a “look” and a shake of her head
Students clap after each performance
Teacher “these scenes between transitions are not ….”
Two students are checking their cell phones under their desks during the performance of other groups.

1:45pm
T – “science two people come on up”
Next group presents… students mostly read in monotone
One student in the group asks for the definition of a vocabulary word. Teacher defines.
S1 – playing with her hair.
Teacher – continues to clarify the parts of the reading
Many student show that they are tired with their body posture. Student appear bored.
One girl is lazily playing with another boys hair in the front. One student has a cell phone under the desk. Two girls left the room.
Teacher begins a Q & A. Students in the front participate – those in the back are passive.
Another girl begins to play with the hair of a female student.
T – “we are going to start scene three”
Students from group three walk to the front.
1:45 pm.
T – redirect the students. Chatter dies down.
Sitting student reads… fiddles with his shirt collar and appears nervous. Legs are swinging.
Girl is writing in her journal
Students are distracted by someone signing outside. Two of the standing students look out the window. Students continue to read the scene in a monotone.
Two other students giggle.
1:55pm
Students at the font returns the text to the front
Teachers at the back of the room summarizes the answers
Announcement for the end of the day are made on the PA. Student display exit behaviors.
Appendix D Survey Questions and Data

Pre/Post Questions
1. What is/was the task? Test
   - Homework
   - Lab or Hands-on Task
   - Project
   - Other

2. What class is/was this task done in?
   - English
   - Social studies
   - Math
   - Science

3. Will/did you do this task individually or in a group?
   - Individually
   - Small group of 2-4 students
   - Large group of more than 5 students

4. Before/After the task rate the following self-efficacy statements on a 1-5 scale.
   1 = Not at all true for me
   2 = A little true for me
   3 = Some what true for me
   4 = Mostly true for me
   5 = Very true for me

   Self-efficacy statements:
   - I believe I will receive an excellent grade on this task
   - I am certain that I can read the most difficult parts of this task
   - I am confident that I can learn the concepts taught in this task
   - Considering the difficulty of this course, the teacher and my skills I am confident I will do well in this class
### UCONN Study Self-Efficacy DeCoster Data

#### Pre-Task Survey data

<table>
<thead>
<tr>
<th>Code</th>
<th>Task Type</th>
<th>Question #1</th>
<th>Question #2</th>
<th>Question #3</th>
<th>Question #4</th>
<th>Class difficulty</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-7</td>
<td>homework</td>
<td>social studies</td>
<td>Individual</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B-10</td>
<td>homework</td>
<td>social studies</td>
<td>Individual</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>B-6</td>
<td>homework</td>
<td>social studies</td>
<td>small group</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B-7</td>
<td>homework</td>
<td>social studies</td>
<td>Individual</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C-7</td>
<td>homework</td>
<td>social studies</td>
<td>Individual</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A-8</td>
<td>lab or hands on</td>
<td>English</td>
<td>small group</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>B-5</td>
<td>test</td>
<td>science</td>
<td>Individual</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>A-10</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A-11</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>A-9</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>B-9</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>C-4</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C-5</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>C-6</td>
<td>test</td>
<td>social studies</td>
<td>Individual</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Average and SD

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>average</td>
<td>3.64</td>
<td>0.98</td>
</tr>
<tr>
<td>SD</td>
<td>3.86</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>4.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>4.07</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>3.64</td>
<td>1.12</td>
</tr>
</tbody>
</table>

**Comments**

B-6 Overall it will be an easy task, but whether or not I remember very vocabulary word I'm defining will be the challenging part.

C-6 I feel confident about studying for the task as long as I don't feel pressured for time.
### Post-Task Survey data

<table>
<thead>
<tr>
<th>Code</th>
<th>Completed</th>
<th>Task Type</th>
<th>Which class</th>
<th>Grade</th>
<th>Reading</th>
<th>Concepts</th>
<th>Skill</th>
<th>Class difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-6</td>
<td>25-Oct</td>
<td>homework</td>
<td>social studies</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>C-7</td>
<td>12-Oct</td>
<td>homework</td>
<td>English</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Skipped</td>
<td>12-Oct</td>
<td>homework</td>
<td>social studies</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>B-5</td>
<td>27-Oct</td>
<td>lab</td>
<td>science</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B-10</td>
<td>23-Nov</td>
<td>lab</td>
<td>social studies</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>B-9</td>
<td>23-Nov</td>
<td>Lab</td>
<td>social studies</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>A-10</td>
<td>27-Oct</td>
<td>test</td>
<td>math</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>A-8</td>
<td>27-Oct</td>
<td>test</td>
<td>English</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C-6</td>
<td>26-Oct</td>
<td>test</td>
<td>social studies</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>B-7</td>
<td>23-Nov</td>
<td>test</td>
<td>social studies</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C-5</td>
<td>23-Nov</td>
<td>test</td>
<td>social studies</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>A-11</td>
<td>2-Nov</td>
<td>test</td>
<td>math</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>A-9</td>
<td>2-Nov</td>
<td>test</td>
<td>social studies</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A-7</td>
<td>2-Nov</td>
<td>test</td>
<td>English</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C-4</td>
<td>1-Nov</td>
<td>test</td>
<td>social studies</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td># of students</td>
<td>15</td>
<td>average</td>
<td></td>
<td>3.87</td>
<td>4.53</td>
<td>4.40</td>
<td>4.47</td>
<td>4.13</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td>0.84</td>
<td>1.09</td>
<td>0.56</td>
<td>1.03</td>
<td>0.69</td>
</tr>
</tbody>
</table>

### Comments:

- **B-5** At first I didn't think I would do well, but I did better than I thought.
- **A-8** I got a B- which was alright. I was happy because I thought I was going to fail but I prefer to get A's over B's.
- **B-6** I feel that I studied sufficiently to do well on the test.

### Survey pre-post analysis

<table>
<thead>
<tr>
<th>Code</th>
<th>Completed</th>
<th>Task Type</th>
<th>Which class</th>
<th>Grade</th>
<th>Reading</th>
<th>Concepts</th>
<th>Skill</th>
<th>Class difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre mean</td>
<td></td>
<td></td>
<td></td>
<td>3.64</td>
<td>3.86</td>
<td>4.00</td>
<td>4.07</td>
<td>3.64</td>
</tr>
<tr>
<td>Post mean</td>
<td></td>
<td></td>
<td></td>
<td>3.87</td>
<td>4.53</td>
<td>4.40</td>
<td>4.47</td>
<td>4.13</td>
</tr>
<tr>
<td>Post-pre mean difference</td>
<td></td>
<td></td>
<td></td>
<td>0.22</td>
<td>0.68</td>
<td>0.40</td>
<td>0.40</td>
<td>0.49</td>
</tr>
</tbody>
</table>
Appendix E Initial codes and frequencies

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy (from student statements)</td>
<td></td>
</tr>
<tr>
<td>High efficacy</td>
<td>255</td>
</tr>
<tr>
<td>Low efficacy</td>
<td>79</td>
</tr>
<tr>
<td>Low and high efficacy</td>
<td>34</td>
</tr>
<tr>
<td>External Factors – Environment</td>
<td>94</td>
</tr>
<tr>
<td>Schedule</td>
<td>9</td>
</tr>
<tr>
<td>Temperature of the classroom</td>
<td>32</td>
</tr>
<tr>
<td>Student behaviors for learning</td>
<td>190</td>
</tr>
<tr>
<td>Student negative behaviors for learning</td>
<td>43</td>
</tr>
<tr>
<td>Student positive behaviors for learning</td>
<td>147</td>
</tr>
<tr>
<td>Social context promoting self-efficacy</td>
<td>34</td>
</tr>
<tr>
<td>Social context that decreases self-efficacy</td>
<td>50</td>
</tr>
<tr>
<td>Low efficacy experience Student</td>
<td>28</td>
</tr>
<tr>
<td>Metacognition</td>
<td>94</td>
</tr>
<tr>
<td>External Factors - School Structure</td>
<td>145</td>
</tr>
<tr>
<td>Schedule</td>
<td>12</td>
</tr>
<tr>
<td>Use of technology</td>
<td>69</td>
</tr>
<tr>
<td>External Factors - teachers/coaches/adults</td>
<td>10</td>
</tr>
<tr>
<td>Low Efficacy Expectations</td>
<td>108</td>
</tr>
<tr>
<td>Low efficacy experience Teacher</td>
<td>105</td>
</tr>
<tr>
<td>Low efficacy experience Family</td>
<td>3</td>
</tr>
<tr>
<td>High efficacy expectations</td>
<td>185</td>
</tr>
<tr>
<td>High efficacy experience student</td>
<td>107</td>
</tr>
<tr>
<td>High efficacy experience teacher</td>
<td>70</td>
</tr>
<tr>
<td>High efficacy experience family</td>
<td>8</td>
</tr>
<tr>
<td>Teacher influence</td>
<td>111</td>
</tr>
<tr>
<td>Teacher encouragement</td>
<td>32</td>
</tr>
<tr>
<td>Teacher discouragement</td>
<td>79</td>
</tr>
<tr>
<td>Positive performance outcome</td>
<td>72</td>
</tr>
<tr>
<td>Negative performance outcome</td>
<td>47</td>
</tr>
</tbody>
</table>
Appendix F Matrix of Co-occurrence of codes (screen shot from Dedoose® software)
### HOW SELF-EFFICACY IS PERCEIVED BY HIGH SCHOOL STUDENTS

<table>
<thead>
<tr>
<th>Codes</th>
<th>SE - existing community and positive use of resources</th>
<th>Negative social skills</th>
<th>Negative self-efficacy</th>
<th>Positive social skills</th>
<th>SE - to meet others expectations</th>
<th>Time</th>
<th>Organization skills</th>
<th>Social - SE</th>
<th>Positive self-regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SE - Academic Achievement</td>
<td>22 18 3 7 12 1 4 7 13</td>
<td>3 4 1 7</td>
<td>3 15 5 12</td>
<td>1 7</td>
<td>5 18</td>
<td>3 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative prior academic</td>
<td>10 4 2 2 6 1 1 9</td>
<td>7</td>
<td>3 4 2 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prior positive academic</td>
<td>7 6 5 1 1 4 2 1 1</td>
<td>5 1 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>academic achievement not</td>
<td>1 1 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE - enlisting social resources</td>
<td>1 1</td>
<td>0 5 5 6 1 5 4 1 1</td>
<td>1 2 10 6 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative social resources</td>
<td>1 1</td>
<td>1 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher unhelpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>positive use of social</td>
<td>1 1</td>
<td>7 4 5 6 1 9 2 1 1</td>
<td>1 7 3 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td>3 2 1 1 1 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers</td>
<td></td>
<td>2 2 1 1 1 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

63
Appendix G Matrix of media vs code (screen shot from Dedoose® software)
Appendix H Statements that are coded for both high efficacy and meeting one’s own expectations

I think it’s always better after you complete the task. Because after you do something you kinda forgot that you came to it with more than the limitation you put on yourself.

Focus Group Interview 11-19-2015

also learned that by just saying “oh I can I can do this or I can understand this do well on it that that also boost your confidence by a lot.

Focus Group Interview 11-2-2015

Um, like usually in the past I would put all the responsibility on the teacher. It is like, if they didn’t teach it right then it’s not my problem, sorry, and I’m not going to learned it. But recently I have had teachers, I don't necessarily understand it the first time they teach it. So then, I have to go back myself. I have to teach myself, just like okay, I have to take some responsibility now.

Focus Group Interview 11-19-2015

Student 1: I put the responsibility on myself, because I don’t know if it's a bad thing but I've never put like an immense amount of trust on a teacher. Cause I always, like, taught myself. At the end of the day if they're not teaching me the right way, like if I have the book, I am going to teach myself.
Interviewer: Okay, so you look for your own resources. If you can’t get it you find it?
Student 1: Like if I have a good teacher with me and I have the resources it's gonna go hand-in-hand.
Student 2: What if you don’t?
Student 1: But if I don't, I mean I’ll still survive

Focus Group Interview 11-19-2015

As far as the learning goes it’s the responsibility is on you. Cause at the end of the day, my mom's not gonna do my homework for me. It’s like, it’s me! Like she’s done with school now. So I got to do myself. So unless I have a question she can try to help me but it’s on me not her.

Focus Group Interview 11-19-2015

I think it’s (confidence) always better after you complete the task. Because after you do something you kinda forgot that you came to it with more than the limitation you put on yourself.

Focus Group Interview 11-19-2015
As far as the learning goes it’s the responsibility is on you. Cause at the end of the day, my mom's not gonna do my homework for me. It’s like, it’s me! Like she’s done with school now. So I got to do myself. So unless I have a question she can try to help me but it’s on me not her.

Focus Group Interview 11-19-2015