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Self-efficacy and Adolscent Development: How Educators Can Foster Its Growth

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SELF-EFFICACY AND ADOLESCENT DEVELOPMENT: HOW EDUCATORS CAN FOSTER ITS GROWTH

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Abstract

All teachers want their students to graduate high school. All teachers want their students to be successful in the classroom. All teachers deal with students that appear to give up or simply not try at all. Students, especially as they enter high school, have built their self-efficacy throughout their educational career. Students walk into high school with a very different beliefs about how well they are going to do, especially on a particular subject. This literature review highlights how self-efficacy influences learning, goals, and overall academic success of adolescents. The review also highlights what educators and schools can do to help foster the growth of positive self-efficacy in students, with some emphasis on students in urban populations and with disabilities. It was concluded that building a community within the classroom and school, teaching with credible culturally relevant curriculum, building relationships with parents, and helping students feel success all affect the academic self-efficacy of students.

Table of Contents

CHAPTER I: INTRODUCTION

The sun was streaming in through the big windows at the side of the room. The sun lit the classroom in such a way that it almost spread joy by simply being present. Ms. Pieper and her student, Ian, were sitting in the otherwise empty space at one of the many tables. Ian was a high school student identified as a struggling reader early in his education journey. Ms. Pieper was trained to help struggling students. In front of them was a reading assignment for the 11th grade student. Ian sighed, "Why do I even have to do this?" Ms. Pieper replied, "So you can graduate next year. Ian, why don't you try reading some of this on your own, and I will come back and help you answer the questions." She stepped away from Ian, knowing if he tried the reading on his own, he would likely be able to answer many of the comprehension questions, or at least talk through them with her. She waited a few minutes at her computer before returning to the student. Ian had not attempted any of the reading.

In order to get the assignment done in the time they had, Ms. Pieper read the assignment out-loud and they were able to answer the questions together. Ms. Pieper had to guide Ian through every step, even though she knew Ian could have at least started the assignment on his own and asked her questions along the way. Ms. Pieper and Ian had known each other since he started high school. They worked closely together on a regular basis and Ms. Pieper knew how Ian worked in school. He struggled with reading and when any academic task involved a lot of reading Ian would always want someone to help him with the entire assignment.

As a teacher, I have seen dozens of students, many of whom lacked confidence, motivation, or positive academic self-efficacy. Many of my students have even had difficulty starting an assignment. Many of the students I have worked will sit and wait to start an assignment until an adult guides them. They want an adult to read the directions and help them step by step. I have seen students ask about every answer they figure wanting to make sure it is correct. They are not confident in their abilities whether the assignment is a strength or a weakness.

Students, who are struggling in school, whether labeled as special education or low achieving students, often receive intervention or help in many ways throughout their schooling. If students continue to receive needed intervention, they may see themselves as bad at a particular task or academic skill. If students see themselves as poor performing at a task, or having low academic self-efficacy, they may not even attempt the task until someone will guide them through every step of the way (Bandura, 1993). Additionally, if students have low self-efficacy, they will have lower motivation to persevere through a challenging task (Bandura, 1993). In my own teaching, I have seen students avoid tasks, or simply avoid the classroom altogether, if they have low academic self-efficacy and feel like they will not successfully complete the task.

My work as a teacher has been entirely in low-income schools. The students I have worked with have primarily been students with disabilities. I have worked within the urban setting and therefore have worked primarily with urban students and especially young men of color. I have seen my students struggle in school, and even give up on the idea of graduating. I wanted to understand better, what is affecting the academic lives of my students and what I could do to better support students. I wanted to research and understand what I could do as a teacher, if

anything, to help my students feel more successful, be more successful, and ultimately graduate high school with strong academic (reading, writing, work organization) skills.

Definition of Terms

Self-efficacy. Self-efficacy is defined as one's own belief about his or her capabilities to properly perform a task or influence the events in their life (Bandura, 1993). A person's self-efficacy can affect many cognitive areas for an individual including feeling, thinking, motivation, and behavior (Bandura, 1993). Having a high academic self-efficacy has been shown to result in more academic success (Bandura, 1993; Hwuang et al., 2016; Klassen, 2010; Pearson, 2008; Zimmerman, Bandura, & Martinez-Pons, (1992). Self-efficacy is not the understanding that one is an expert at a task or field of study, but rather one has the ability to work through the challenge that lay before you. Students need to believe and understand that it is ok not to know everything; they simply have not learned it yet. Students also need the support, encouragement, and challenges from the adults in their lives (teachers, parents, mentors, etc.) to understand that to become skilled at a task takes time and continual attempts. Self-efficacy can be built and grow, which can influence the self-efficacy in other areas, particularly in the academics (Long, Monoi, Harper, Knoblauch, and Murphy, 2007).

Metacognitive strategies. Aydin (2016) referred to the work of Flavell (1979) and Zimmerman (2002) to define metacognition as someone being aware of and thinking about his or her own thoughts. Students should be aware that they are thinking as they are learning. It is important for students to know the cognitive strategies they use to solve problems and perform tasks they are given. Thinking about your own thinking is a difficult, but important part of understanding how

you learn. Understanding of one's own metacognitive strategies is an essential part of education (Aydin, 2016).

Goal orientations. Goals guide people in their choices related to what they want to achieve. Teachers want all students to graduate from high school and be successful in life afterwards. Goals and goal orientations can influence behaviors and academic perseverance of students (Long, Monoi, Harper, Knoblauch, & Murphy, 2007). Long et al., (2007) referred to Elliot and Harackiewicz (1996) who determined that there were two types of goal orientations, those who approached and those who avoided. People that were more approach oriented wanted to seem successful while those who avoided did not want to appear to fail. These orientations may help students find success in academics.

Culturally relevant curriculum. A student's culture can be and is often different from that of their teachers. Kelley, Siwatu, Tost, and Martinez (2015) defined culturally relevant curriculum using Siwatu's (2007) definition which includes incorporating the student's knowledge of their own culture to help teach a lesson. Approaching students with culturally relevant curriculum can be the beginning of finding academic success. As a student experiences more academic success they will be willing to try more challenging tasks, especially if they feel connected to the culturally relevant curriculum (Kelley et al., 2015). If a task is culturally relevant, than the students can see themselves in the task and can identify with what the learning objective is.

Motivation. Long et al. (2007) used the work of Graham and Weiner (1996) to define motivation as thoughts that work through a process to understand why a person performs a certain way. In their research, Long et al. (2007) found the growth of self-efficacy also affected the growth of motivation. The also referenced Stanford research conducted by Steele, Spencer, and Aronson (2002) that found that motivation can be higher among white students compared to

African-American students. Motivation can affect how a student works through school and what goals they make for themselves. If students do not have strong academic self-efficacy, they will be less likely to make higher academic goals for themselves. (Zimmerman, Bandura, & Martinez-Pons, 1992).

Purpose Statement

This thesis will discuss academic self-efficacy of students, how to build self-efficacy, and how teachers can affect self-efficacy of students to support their academic success. If students have higher academic self-efficacy they will likely be more motivated, have more perseverance, have stronger academic goals, and be more academically successful (Aydin, 2015; Bandura, 1993; Zimmerman et al., 1992). As a teacher, I recognize my limitations at influencing students, but I also understand that individual teachers and school communities can have a great deal of impact on a student. One teacher can influence students' thinking about their own skills and abilities to help them become more academically successful, from wherever they start.

CHAPTER II: LITERATURE REVIEW

Self-Efficacy

To locate the literature for this thesis, searches of Education Journals, ERIC, JSTOR, EBSCO MegaFile, and academic journal internet searches were conducted for publications from 1977-2017. This list was narrowed by only reviewing published empirical studies articles from peer-reviewed journals that focused on self-efficacy, building self-efficacy, and mindsets. The key words used in these searches were “self-efficacy”, “building self-efficacy”, “self-efficacy and urban students”, “self-efficacy and high school students”, “self-efficacy and motivation” and “self-efficacy and growth mindset”. The structure of this paragraph is to review the literature in the following order: Self-efficacy, Building Self-efficacy, and Growth Mindset and Self-efficacy.

Self-efficacy is the self-perception of how well one will perform at a specific task. Albert Bandura, in his landmark study in 1977, defined and put forth the basis of the term self-efficacy. He determined that self-efficacy comes from performance accomplishments, vicarious experiences, verbal persuasions, and physiological states and is the expectation of one’s ability to perform a task and how much one will persevere if the task is perceived as difficult (Bandura, 1977). High self-efficacy is the thought that a person will be able to accomplish something as opposed to low self-efficacy when a person thinks he or she will likely fail at a task. Jungert and Rosander (2010) found that a student with high self-efficacy will take on tasks more as a challenge in contrast to a person with low-self efficacy who will understand the tasks more as

threats. Zimmerman (2000) also found that a high self-efficacious student will be more willing to even attempt a new task. It is important to understand how self-efficacy affects students and how to increase their self-efficacy and related perceptions.

Building Self-Efficacy

Albert Bandura researched self-efficacy and has written many articles and literature reviews on the topic regarding its relationship to academics, and how it impacts students. Bandura wrote one such review (1993) to discuss self-efficacy and its relationship with cognitive, motivational, affective, and selection processes. As he researched self-efficacy and its cognitive relationship, he formed the idea that how a person performs is based on an individual's self-efficacy (Bandura, 1993). Similarly, if a person has a higher sense of self-efficacy he or she will see himself or herself as succeeding, however if the same person has a low sense of self-efficacy he or she will see himself or herself as failing. To put this idea in a specific context Bandura cited J.L. Collin's research titled *Self-efficacy and ability in achievement behavior* (1982) which stated that having a positive self-efficacy about mathematics predicted a better attitude over the actual skill a student possessed.

Bandura continued the review with motivational, affective, and selection processes. He concluded that when someone cannot handle the adversity that is around him or her, that person develops anxiety about the situation (Bandura, 1993). However, when an individual has a strong belief in his or her own self-efficacy, that person will likely persevere towards the goal even after failing. He also concluded that an individual's particularly low self-efficacy could negatively affect their mental and emotional patterns. He followed these findings with the assertion that if a person has a higher sense of self-efficacy they will likely consider more career options.

These conclusions suggest that teachers and educators should be mindful of how students see themselves and their abilities. Teachers and educators should encourage students, especially in the face of adversity, and continue to point out a student's true strengths and abilities. Bandura finished his review with an important statement: "Once formed, efficacy beliefs contribute significantly to the level and quality of human functioning" (Bandura, 1993, p. 145). For students to achieve quality learning and functioning in academics they need a positive self-efficacy.

Researchers understand that self-efficacy is deeply important for learning and is interwoven throughout the academic life of a student. They have sought to find out exactly how self-efficacy is built and what internal and external factors have impact upon it. Bandura, Barbaranelli, Caprara, and Pastorelli (1996) set out to study and understand the influences that socioeconomic status, family, peer groups, and self-learning processes had on the self-efficacy of students. The researchers took different components of each of the theorized influences and created a hypothesized network of interweaving connections. The four main components of the network were socioeconomic status, parental influence including their own self-efficacy of parenting, the goals and perceived self-efficacy of the students, and the emotional impacts on self-efficacy including social interactions (Bandura et al., 1996).

The participants were 279 students in 6th and 7th grade from a middle school near Rome, Italy. Eighty-eight percent of the mothers of the students participated in the research as well (Bandura et al., 1996). The students and schools themselves represented a diverse composite of socioeconomic status. The researchers based this on the father's occupation, which ranged from unskilled to managerial occupations. The surveys given to the students were about their own perceived self-efficacy, moral disengagement, problem behavior, parental academic efficacy, parental and children's academic aspirations, Data was obtained regarding social and emotional

behavior about each of the students from the students themselves, their peers, and their parents. Academic achievement data was obtained by the academic tests given at the middle and end of the school year and graded by the student's teacher.

The results of the study indicated several factors that contribute to the self-efficacy and academic achievement of the students. The socio-economic status of the family affected the students by contributing positively to their academic efficacy, education goals, positive moral, connections, lower problem behavior, and better academic success (Bandura et al., 1996). Similarly, parental aspirations also positively affected a student's ability to ignore peer pressure and adhere to their own moral code (Bandura et al., 1996). Finally, the results also showed that a student's positive perception of their own self-regulatory skills allowed them to adhere to their own moral code and maintain positive behaviors contributing to their own successful academic achievement (Bandura et al., 1996).

The authors conclude that parental efficacy and the academic goals positively contribute to academic success (Bandura et al., 1996). Students' academic success was also linked to their self-efficacy about self-regulatory skills, positive peer relationships, adherence to own moral code, and ability to have positive self-thoughts (Bandura et al., 1996). The authors also suggested that a student's self-efficacy regarding social situations and their ability to manage their own academics reduces the student's willingness to give up when a situation becomes difficult (Bandura et al., 1996).

Teachers can use these results to influence the way they interact with parents. Teachers can help parents navigate the world of education and make goals beyond completion of high school. If parents have a positive self-efficacy about their ability to help their own children, the children will have a positive self-efficacy about their academic goals. Teachers can also facilitate

positive relationships between students by creating a positive, safe, and inclusive environment in their own classroom. Teachers should create a learning space that fosters positive peer interaction and encouragement. Teachers can also use these results to help focus their teachings on skills of learning to help their students feel more self-efficacious about their own abilities. If students have positive self-efficacy about their academic skills they will likely persevere when the situation becomes more difficult (Bandura et al., 1996).

Researchers have continued to add to the growing body of research on how self-efficacy and academic achievement are related. Hwang, Choi, Lee, Culver, and Hutchison (2016) wanted to not only study this relationship, but add to the understanding of how self-efficacy affects academics over time, as how self-efficacy is similar cross-culturally. More specifically, the researchers wanted to determine if past academics predict self-efficacy beliefs, if self-efficacy beliefs predict future academic success, and how, if at all is self-efficacy and academic achievement reciprocal (Hwang, Choi, Lee, Culver, & Hutchinson, 2016). The researchers used data collected from 1,177 students from the Korea Youth Panel Survey (KYPS). They specifically used students that had taken the survey each year from 2003 to 2008 and had self-selected themselves into a liberal arts track for learning. The survey included questions measuring academic achievement and self-efficacy (Hwang et al., 2016).

The results of this study showed that there was a reciprocal relationship between self-efficacy beliefs and academic achievement. The data revealed that each preceding grade had a positive correlation with predicting the next earned grade starting in 8th grade and continuing all the way to 12th grade (Hwang et al., 2016). The results also showed that past academic success had a bigger impact on self-efficacy than self-efficacy did on future academic success. Similarly, the results show that past academic success can predict current academic self-efficacy (Hwang et

al., 2016). They also found the relationship between academic achievement and self-efficacy can be seen in both the short term and long-term life of a student (Hwang et al., 2016).

Teachers and educators can use this understanding of self-efficacy and academic achievement to build into their classroom times where students would be successful. The researchers also suggest reflecting on past academic performances to determine what skills the students have and to build from those, taking care not to reflect on how poorly a student performed (Hwang et al., 2016).

Self-Efficacy and How It Affects Learning

Motivation. Self-efficacy has to do with how one perceives their own skills. In turn, researchers have studied how to motivate students by building their self-efficacy. Aydin (2015) studied self-efficacy, metacognitive strategy uses (ability to think about one's own thoughts), and motivation to learn the subject of biology with 286 Turkish high school students between ages 15-17. He wanted to analyze the relationship between self-efficacy and the use of strategies and motivation. Translated measures for self-efficacy, metacognitive scales, and academic motivation were administered in the student's classrooms (Aydin 2015).

Aydin's results indicated that self-efficacy was the most positively correlated with the use of metacognitive strategies and intrinsic motivation (Aydin, 2015). Using path analysis, Aydin's results also showed intrinsic motivation had a generally positive relationship with self-efficacy. The positive relationship in turn affected the students' use of metacognitive strategies (Aydin, 2015). Another indication from his results showed that when students continue to work but see no connection between their work and the results they are getting they will lose their motivation to keep trying (Aydin, 2015). These results indicate that students will need to see positive results from their efforts to think positively of their abilities. If teachers directly teach the use of

metacognitive strategies and build self-efficacy, students will likely to be motivated to learn even if the task at first appeared difficult.

Researchers continued to want to know how and in what ways self-efficacy affected motivation, or more specifically, goal setting. Zimmerman, Bandura, and Martinez-Pons (1992) set up a study to determine how goals from parents and students and the student's self-efficacy affected academic achievement.

The researchers collected data from 102 ninth and tenth graders in a large eastern city in the United States. The students came from a lower middle class population and a diverse population including Asian, Black, Hispanic, and White students. The researchers used social studies grades at the point of study (Zimmerman et al., 1992). They used self-reporting surveys that collected data on the student's self-efficacy, grade goals for both parents and students, and teacher given grades at the end of the year and from previous years (Zimmerman et al., 1992).

The data from the study show that parents had significantly higher grade goals than their children. They also found that a student's self-efficacy was significantly impacted by their previous grade in social studies (Zimmerman et al., 1992). The student's self-efficacy was also significantly, positively correlated with grades goals as well as their final grades they earned. The students perceived self-efficacy of self-regulated learning and self-efficacy of strong academics was significantly correlated (Zimmerman et al., 1992). The data presented showed significant correlation with a student's perceived self-efficacy of academics, their goals, and their final course grade. In connection with this, the researchers also found that students with high self-efficacy also had higher personal academic goals (Zimmerman et al., 1992).

Teachers and educators can use this data to help set up a type of classroom that builds students self-efficacy. Essentially the researchers found that if a student has high academic self-

efficacy it will lead to higher academic goals that will often lead to high academic achievement (Zimmerman et al., 1992). Teachers can work on building self-efficacy in part by creating history of academic success at the start of the school year or the start of the semester.

Courage. Students need more than motivation to try a new task, they also need to feel encouraged and safe in order to try. Martin (2011) studied the idea of courage in the classroom. Self-efficacy and courage are related by definition. As previously stated self-efficacy is defined as a person's belief on their own capabilities, ability to perform a task, and influence the events of their lives (Bandura, 1993) and courage being defined as "perseverance through academic difficulty in the face of fear" (Martin 2011, p. 146). He hypothesized if a student has a higher amount of courage they will likely also possess a higher amount of self-efficacy. Martin studied 7,637 responses of Australian high school students ages 12-18. The schools the students attended were a mix of government and independent schools as well as a mix of urban and regional schools from different states in Australia. Teachers administered the surveys to the students who completed them individually during regular class time (Martin, 2011). The survey measured individual academic courage, confidence, avoidance and helplessness. Questions were derived from the Motivation and Engagement Scale – High School Assessment. The academic measurement of literacy and math was adapted from the Wide Range Achievement Test 3 (Martin, 2011).

Results of the study showed that students with a high level of confidence participated in school more, enjoyed school more, and were able to organize their academic work better (Martin 2011). Furthermore, results showed that confidence, more than the other constructs, could adjust the expectations of the task (Martin, 2011). He stated that perseverance and fear are interconnected and one will often play off another and impact a student's ability to have a

positive self-efficacy (Martin, 2011). His results also indicated that courage and perseverance are not only vital for students to possess but for teachers to foster an environment encouraging the two aspects to grow.

Martin (2011) concluded that academic skills of students could be strengthened if educators would create an environment in which students felt safe to fail and felt safe to continue the task even when it became difficult. He also concluded it would be incredibly important for teachers to encourage their students even though they feel fear or are low in perseverance, there can still be an end result with a positive outcome (Martin, 2011).

Self-Efficacy Effects and Diverse Learners

Ethnicity and self-efficacy. Efficacy research in recent years has begun to focus specifically on diverse student populations. Urban students with a multi-cultural background are often overrepresented in discipline referrals and are likely to be suspended from school more often than their Caucasian peers (U.S. Department of Education for Civil Rights, 2014). Researchers have studied what positive effects schools and classrooms can implement in order to better support diverse learners. Kerpelman, Eryigit, and Stephens (2008) studied 374 secondary African American students in a rural school district. The goal of their study was to understand the connection between long-term educational goals of the students and how three categories affected them: self-efficacy, ethnic identity, and perceived future education orientation. The measures the researchers used were a future goals questionnaire, and an ethnic identity measure, a general self-efficacy measure, and a parental support measure.

The results show that ethnic identity, self-efficacy, and parental support, particularly the maternal, all positively impacted future education goals for both male and female students. The researchers found that African American females overall placed more importance on academic

effort, achievement and future education than their male counterparts (Kerpelman et al., 2008). However, strong self-efficacy, ethnic identity, and perceived maternal support influenced both male and female students to make higher education goals (Kerpelman et al., 2008). The authors concluded that "regardless of grades...if African American males do not believe they will be able to attain entry into higher education due to social and economic barriers, they may not even entertain such possibilities (Kerpelman et al., 2008, p. 1004). This shows that is it important to strengthen and cultivate ethnic identity, self-efficacy, and parental support with particular focus on self-efficacy and particularly of African American males.

African-American students. Long, Monoi, Harper, Knoblauch, and Murphy (2007) also wanted to better understand the self-efficacy of diverse students. They wanted to know how academic achievement of urban students was associated with interest, self-efficacy, and achievement. They surveyed 255, 8th grade students and the same students when they had transitioned into 9th grade (Long, Monoi, Harper, Knoblauch, & Murphy, 2007). The majority were African American (87%) and receiving free and reduced lunch (61%) (Long et al., 2007). First, students answered questions on their interests and self-efficacy beliefs regarding six academic subject areas: history, mathematics, science, reading, computer science, and art. The questions were asked on a Likert-type response from 0 to 9. The second measure was goal orientation. The researchers measured the students using 18 adapted items from the Patterns of Adaptive Learning Survey. A similar 10-point scale was used to easily compare results from goal orientation and self-efficacy.

Results indicated that domain interests related to the goals of the students were strongly, positively correlated with self-efficacy of the students. Essentially, if the students had a goal in a particular domain then that domain tended to correlate with strong, positive self-efficacy of the students. This connected to their finding that when students believe they will be good at a subject

they will also be interested in it (Long, et al., 2007). In addition, results indicated that achievement was regularly, positivity affected by positive self-efficacy. Reflecting on low-self efficacy, the results also indicated that students who have low efficacy tend to see more difficult tasks as threats. The authors concluded that given the space, skills, and encouragement to have goals and improve self-efficacy, academic achievement will increase across school subjects. Another conclusion made was that schools should greatly value the heritage and community of African American students (Long et al., 2007).

The results of this study indicated that teachers and school administrators should create a safe environment for students to practice their learning and make goals across many different academic domains. Students should be not only allowed but encouraged to study using, as a foundation, culturally familiar tasks in education. Schools themselves, should work towards showing value and celebrating the culture and heritage of the students within its walls. This could increase their self-efficacy as well as their academic performance.

Uwah, McMahon, and Furlow (2008) wanted to add to the study and understanding of the lower academic success of African American males. They stated that not only do African American males have lower academic success compared to Caucasian males but also compared to African American females (Uwah et al., 2008). The researchers wanted to better understand how to support African American males, specifically in high school, in order to help them achieve goals beyond high school. They looked at three aspects of academic success and the relationships among them: (a) psychological sense of school belonging; (b) academic self-efficacy; and (c) educational aspirations (Uwah et al., 2008).

The researchers surveyed 40 African American 9th and 10th grade males at a single high school in a large southeastern United States city. They gained permission from parents, students,

and the school to complete the survey. The students then were gathered in an auditorium for 45-minute blocks over two days (Uwah et al., 2008). The students answered survey questions about demographic information, their individual sense of school belonging, and their academic self-efficacy (Uwah et al., 2008).

The results showed that over all the students had a moderate view of school belonging and a relatively high view of self-efficacy (Uwah et al., 2008). The results also indicated that the student's perception of being liked and the perception of belonging was not significantly correlated with academic self-efficacy. However, the perception of being encouraged to participate and academic self-efficacy were positively significantly correlated (Uwah et al., 2008). Finally, the authors stated that along with the perception of feeling encouraged to participate, a student's educational goals positively significantly correlated with academic self-efficacy (Uwah et al., 2008).

The authors conclude when an African American male student is positively and directly encouraged to participate and become part of the school that will also impact their academic self-efficacy (Uwah et al., 2008). The authors encourage specific and authentic encouragement of participation from the school staff in order to increase the student's self-efficacy (Uwah et al., 2008). This can influence the way teachers and staff interact with African American males in particular. Staff should be able to find roles and encourage their African American male students to engage in them. With the study also finding that academic aspirations play a positive role in academic self-efficacy, it would be important for school staff to actively participate in guiding and growing African American male's knowledge of the what skills are needed after graduation.

African American students have historically been underachieving and undervalued in the American school system. Pearson (2008) wanted to understand what drove academically

successful African American girls to be successful. She wanted to understand what influenced the self-efficacy of the girls that were academically successful. She performed a study with 37 African American 8th grade female students in Oklahoma. She administered the Children's Self-Efficacy Survey (CSES) to all 37 girls who all had a GPA between 3.0 and 4.0. Out of those 37 she conducted in-depth interviews with 10 of the girls (Pearson, 2008).

The results of the CSES showed the girls had moderately high academic, social, and self-regulatory self-efficacy (Pearson, 2008). When asked what was the best and worst thing that has happened to them 90% responded "life" as the best and 46% responded "death of a loved one" as the worst. Two themes came from the surveys and the personal interviews: influences and pressures. A majority of the girls identified a mother or grandmother and peer support as having a positive influence on their success and resiliency (Pearson, 2008). Out of the 10 girls interviewed, eight responded that their peers were a negative pressure, identifying the fact they were considered a geek from some peers who were not in the same academic cohort. The girls continued identifying their ability to resist this negative peer pressure was high and even provided motivation to keep doing well (Pearson, 2008). The results of the interviews stated that 50% of the girls simply stated that in order to focus on their work and be successful they "just do it" (Pearson, 2008). The researcher identified the girls were a part of a school that were specifically for higher achieving students, which may have impacted their self-efficacy (Pearson, 2008).

Teachers and educators can use these findings to increase self-efficacy and achievement in the classroom. Teachers can provide a space for peers to be positive voices to each other. Teachers can also allow students to bring in their personal stories and heroes into the curriculum, knowing that family ties have a large positive influence on African American girls (Pearson,

2008). The researchers also identified that teachers can hold high academic expectations for African American girls even if the girls dress, wear their hair, or speak differently than the teacher (Pearson, 2008). The girls in the study were successful in part because of the positive influences around them telling them they could do it even when it was hard.

Disability and self-efficacy. Diversity in students can be attributed to many factors including race and ethnicity as well as disability. Valås (2001) continued his study of learned helplessness to include students who have been diagnosed with a learning disability and the effects the label has on their academics. He also wanted to understand if any difference existed between students who had been diagnosed with a learning disability and those that were simply low achieving students. Valås hypothesized that low achieving students and students with a learning disability would expect themselves to fail more often than succeed (Valås, 2001). He expanded his hypothesis further by adding multiple factors to be studied including helplessness, depression, self-esteem, and academic expectations (Valås, 2001).

Participants were from central Norway and consisted of 1833 students in grade 4,7, and 9 (Valås, 2001). Of the selected students, 214 of them had previously been diagnosed as having a learning disability label. He used the test scores of mathematics and reading/writing to determine which students were to be considered low achieving and which students were either low achieving or had a disability (Valås, 2001).

Valås (2001) used two different analyses to understand his results. First, he used a multivariate analysis. Using this method Valås' results show that students with a learning disability and students that were low achieving displayed significantly more self-helplessness and determined that success in math and reading/writing was more about skill than hard work (Valås, 2001). These same students also reported significantly more depression, lower self-

esteem, and lower expectations for their academics (Valås, 2001). The teachers also identified male students as being more helpless than female students. Using structural equation modeling (SEM) Valås also found that students with a learning disability and low achieving students determined that academic success was more about ability and less about hard work. They also showed lower self-esteem and more depression than their high achieving peers (Valås, 2001). One difference found between low achieving and students with a learning disability was that students with a learning disability showed more helplessness and determined more often that academic success was because of ability (Valås, 2001). Finally, the results from the SEM analysis showed that helplessness was negatively related to academic expectations and self-esteem, as well as positively related to depression. Also important was that academic expectations were positively related to self-esteem (Valås, 2001).

Valås (2001) concluded that both students with a learning disability and low achieving students reported as having more helplessness behaviors, lower academic expectations, more depression, and lower self-esteem. He also concluded that students have simply come to expect to fail and will not be able to achieve academically (Valås, 2001). He recommended caution in diagnosing students into special education which resulted in more negative academic results than students who were low achieving (Valås, 2001).

Teachers and educators can use what Valås (2001) found as caution for identifying students with a learning disability. If a student is incorrectly identified as having a disability it could significantly and negatively impact their academic trajectory. Teachers can also use these results to understand and guide students to a more positive self-outlook and help students understand how ability and success are not always pairs but hard work is also important. Teachers and educators can explicitly teach students about how effort over ability is as much, if

not more so, a part of success. Teachers can also help students by identifying their strengths and building the students skills from there. Starting with strengths can help the students experience success and become more motivated to try a new task.

Researchers want to understand what are the academic differences and beliefs between students with and without disabilities. They want to know what students with disabilities believe about their academics, why they believe it, and how it can affect their academics. Klassen (2010) researched students with and without disabilities. He wanted to research how students with learning disabilities (LD) identified their self-efficacy, how their self-efficacy predicted achievement, and how self-regulatory skills impacted students with LD (Klassen, 2010).

Klassen studied 146 students in grades 8 and 9 at three different high schools in Canada. The LD group of students had 73 participants who, nearly all, had pull-out support to help with their reading writing abilities. He also studied 73 non LD students, whose first language was English, for his control group (Klassen, 2010). The data was collected by both the author and the teachers of the LD students. He used three different measures to gather data on student's beliefs on their own self-regulatory skills, their reading academic skills, and reading self-efficacy. He also gathered data on their English grades at the end of the term (Klassen, 2010).

The results show that students with LD rated their self-regulatory skills lower than their peers without LD. Boys overall also rated their self-regulatory skills lower than girls (Klassen, 2010). These results also indicate that girls, whether they have a disability or not, identified as having higher self-regulatory self-efficacy than boys. This self-regulatory efficacy was also a significant predictor in grades at the end of the term. If students had a high self-regulatory efficacy they also tended to have higher grades at the end (Klassen, 2010). Self-regulatory efficacy was almost as predictive to end of year grade as actual academic ability. Data also

showed that students that came from lower socioeconomic families also had lower self-regulatory efficacy (Klassen, 2010).

This research can guide educators in what they could be helping students with learning disabilities learn. Students with LD need to be taught specifically the strategies that are learning. They should be shown what kind of environment they can help set up for themselves to improve their focus and attention to the task. Students with LD especially need to have experiences where they are successful and feel successful so the academic and self-regulatory efficacy can grow (Klassen, 2010). Teachers should teach and guide students at guiding their own learning (Klassen, 2010).

Teaching Strategies to Increase Self-efficacy

Increasing self-efficacy in all students should be a goal for educators. Developing, choosing, and adapting curriculum and teaching strategies specific for an individual classroom can be done by any teacher. It is important to know and understand strategies one can use to help students access the curriculum and increase their self-efficacy at the same time. Cordova and Lepper (1996) wanted to understand the relationship between contextualization, personalization, and choice and their impact on motivation. The researchers wanted to determine if these three domains used within the context of an academic computer task would increase motivation and thus self-efficacy. The researchers studied 70 elementary students from a private school, with an academic focus on mathematics, in the San Francisco Bay area. A computerized learning game based around futuristic space travel was used by the students to learn math related skills. The researchers divided the students into 5 groups: generic fantasy-no choice, generic fantasy-choice, personalized fantasy-no choice, personalized fantasy-choice, and a control group (Cordova & Lepper, 1996). The fantasy genre was either a space based simulation or a treasure hunt

simulation. Student's playing the different fantasy games were then divided between having the choice to personalize or not the instructionally unimportant visuals of the game. If the game was personalized for the student, the researchers were able to do that based on a questionnaire given before playing the game (Cordova & Lepper, 1996).

The results of the study showed that students without any choice in type of game played made significantly less challenging moves than students who had choice options. Similarly, it was found that students playing the personalized fantasy game made the most number of challenging moves per game. The results also indicated that children without choice or personalization of the game had lower perception of competence (self-efficacy) about the activity. Those having a personalized fantasy game had the highest perception of competence (self-efficacy) (Cordova & Lepper, 1996). These results indicate that allowing students to have personal choice in their learning can improve not only their motivation but also their self-efficacy. This in turn could propel the student into choosing more difficult tasks and be more willing to learn new topics once perceived to be too challenging.

It is important for teachers to understand how to increase self-efficacy in their classroom. The previous study analyzed self-efficacy and motivation, Cheung and Lai (2013) wanted to study the effects that regular classroom teaching has on the self-efficacy of personal development for students. They created the concept of an efficacy-oriented classroom which focuses on and teaches the four domains of building self-efficacy that Bandura (1977, 1997) laid out in his research on self-efficacy (Cheung & Lai, 2013). The current researchers listed the elements and defined the efficacy-oriented classroom as:

a. performance accomplishments (teaching students to look for their own accomplishment);
b. vicarious experiences (using praise of peers to showcase improvements);

c. verbal persuasion (encouraging students, providing feedback);
d. physiological and emotional states (encouraging students to participate in the learning process) (Cheung & Lai, 2013).

The researchers assumed that an efficacy-oriented classroom would impact the personal development self-efficacy (PDSE) of the students. They also hypothesized about the confidence level of Hong Kong secondary students, what demographics impact the PDSE, and does their assumed model fit their data (Cheung & Lai, 2013).

The researchers studied 16,208 secondary Level 4 students in Hong Kong who had the approximate age of 16. The students were from 105 schools and answered 21 questionnaire items. The participants were nearly evenly split between genders. The students took the surveys in a regular class period administered by their school teachers and took approximately 10 minutes for completion. The items were measuring student PDSE, efficacy-oriented classroom teacher, and student use of learning strategies (Cheung & Lai, 2013).

The results from the survey first showed that there was not a significant difference between the male and female students and how they perceived PDSE. The results also showed a direct positive correlation between efficacy-oriented classrooms and student PDSE and student use of learning strategies. The positive correlation between the later and efficacy-oriented classrooms being especially significant (Cheung & Lai, 2013). Another result was that the learning strategies mediator explained 67.6% of the total effect of the efficacy-orientated classroom (Cheung & Lai, 2013). In other words, when students fully understand ways to learn and strategies to learn it can create an efficacy-orientated classroom (Cheung & Lai, 2013).

The authors concluded that higher levels of a student's PDSE is related to their academic success (Cheung & Lai, 2013). The authors acknowledged that this finding, as well as the result

that a parent education influences academic self-efficacy is consistent with previous research conducted by Bandura et al., (1996) (Cheung & Lai, 2013). The authors also conclude that their results indicate that regular classroom teaching does impact a student's PDSE through the teaching and learning of specific learning strategies (Cheung & Lai, 2013). They determined that when a classroom is focused more on self-efficacy it builds and fosters positive thinking about PDSE which will in turn impact a student's academic achievement (Cheung & Lai, 2013).

The implication of this study is that teachers should orient their classroom to focus on building positive self-efficacy. The authors suggest that this can be done by focusing on the four elements (performance accomplishments, vicarious experiences, verbal persuasion, physiological and emotional states) they used to describe an efficacy oriented classroom (Cheung & Lai, 2013). Teachers can also build the self-efficacy of their students within their efficacy oriented classroom by focusing on learning how to learn. Students may need to be taught specifically and exactly learning strategies that can help build greater academic success and in turn building stronger academic self-efficacy.

Culturally relevant curriculum. Educators have always sought ways to connect with their students and have students connect with what is being taught. Studies have been conducted regarding how students respond to culturally relevant curriculum. Few studies had been presented on how culturally relevant curriculum and self-efficacy are connected. Kelley, Siwatu, Tost, and Martinez (2015) wanted to add to the body of research regarding the effects of culturally familiar tasks on the self-efficacy of diverse students. They stated that if a learning environment uses the culture of the students they may be more likely to gain more academically, be more motivated, and have more respect, all of which positively affect self-efficacy (Kelley, Siwatu, Tost, & Martinez, 2015). Kelly et al. compared the reading comprehension of 43 seventh

graders based on one culturally familiar text and one culturally unfamiliar text. The readings chosen for the study were similar to the other in difficulty and number of words. The researchers gathered data on reading comprehension and reading self-efficacy. A similar form of reading comprehension testing as the standardized testing done by the state of the students was used. The self-efficacy surveys were derived from Bandura's scales using a 10-point scale (Kelley et al., 2015).

The results showed a significant difference in test scores with greater understanding being derived from culturally familiar reading versus the culturally unfamiliar task (Kelley, et al., 2015). It was also found that a culturally familiar task could improve reading comprehension and increase reading self-efficacy (Kelley et al., 2015). The implication of this study is that teachers and administrators should be utilizing culturally familiar topics for students. If a student has lower self-efficacy they may "focus on the part they cannot do" and even "visualize failure." (Kelley et. al. 2015, p. 297). Before students even start a reading they may visualize themselves failing, however the study shows that if the reading is culturally relevant to the student it can help improve self-efficacy of reading, allowing the student to be more successful (Kelley, et al., 2015). Students will be able comprehend what they are reading and have increased self-efficacy about reading if it is culturally familiar.

Teachers are always looking for specific ways to teach students, as discussed above, teaching specific strategies can help increase positive self-efficacy in students as well as increase learning. Writing is an important skill to learn and master as it is so correlated with reading and comprehension. If a student can read well and discuss a text well, teachers will want that student to be able to write their thoughts just as well. Garcia-Sanchez and Fidalgo-Redondo (2006) wanted to study impacts of two specific types of self-regulatory writing strategies. They choose

to focus on students with learning disabilities. Their findings could also impact students without a learning disability.

The researchers study consisted of 121 fifth and sixth grade students between 10 and 12 years old. The students were in Spain, where students are not labeled as having a learning disability as in the United States. The researchers choose participants whose learning disability label would be similar to the discrepancy model used in the United States. The students were split into three groups: 48 students were taught a cognitive self-regulation strategy, 41 students were taught a self-regulation strategy based on social cognitive model, and 32 students were taught using the standard curriculum (Garcia-Sanchez & Fidalgo-Redondo, 2006).

The researchers administered to the students two compare and contrast essays. These essays were assessed and used to create the baseline for the research data. They then quantified the essays into two parts text based and reader based measures. The text based measures they quantified were productivity, coherence, and structure of the writings. The reader based measures they quantified were structure, coherence, quality, self-efficacy, and writing process (Garcia-Sanchez & Fidalgo-Redondo, 2006).

The researchers used two teaching models in their experiment. School psychologists were trained in writing psychology and the models taught to the students. The students were taught the writing strategies during the middle of their school year 3 times a week in groups of 6-8 students for 50, 25 minute sessions. The first model was a self-regulated strategy development model (SRSD) created by Graham and Harris (1987). This model used 6 stages of writing:

1. develop and activate background knowledge;
2. strategy goals;
3. modeling or the strategy;

4. memorization of the strategy;
5. collaborative practice;
6. independent performance (Garcia-Sanchez & Fidalgo-Redondo, 2006, p.188-190).

The second model of sequential skills acquisition (SCM) researchers used was based of the research of Shunk & Zimmerman (1997) and Zimmerman (2000, 2002). This model of teaching writing had four sequential levels:

1. observation of the instructor who is also thinking aloud;
2. emulating what was observed in the model;
3. automation in writing process (with focus on the process versus actual writing);
4. adaptation to the environment and the context (Garcia-Sanchez & Fidalgo-Redondo, 2006, p. 190-193).

The results of the study show a significant positive improvement in all text based measures for both groups of students that were a part of the experimental groups. They also found a similar significant positive improvement in all reader based measures for both groups of students that were a part of the experimental groups compared to the control groups (Garcia-Sanchez & Fidalgo-Redondo, 2006). The results also indicate that the writing self-efficacy of the students who were in the experimental groups were positively impacted particularly in the areas of quality of written text, audience, and total writing self-efficacy (Garcia-Sanchez & Fidalgo-Redondo, 2006). Both experimental groups also had statistically significantly more time on the different facets of the writing task than their peers using the standard curriculum including referencing text, reading text, changing text, writing text, and revising text (Garcia-Sanchez & Fidalgo-Redondo, 2006).

Teachers and educators can use the findings of this research as evidence for using strategies in writing that focus on cognitive training and self-regulatory strategies. Both of these strategies had improvement in the process, products, and self-efficacy of the writing for students that struggle in school, with only the SCM having a statistically significant positive impact on self-efficacy (Garcia-Sanchez & Fidalgo-Redondo, 2006). Both strategies had a similar concept of modeling that involves the teacher showing and explaining how to perform each step. Both strategies had students working through the process and doing many forms of self-speech, which can also be implemented in the classroom (Garcia-Sanchez & Fidalgo-Redondo, 2006).

Invitational approach. Bandura's work is the origin of the self-efficacy theory. He knew that self-efficacy was built through different avenues. Usher and Pajares (2006) set out to research and expand on Bandura's original 4 areas through which self-efficacy was built as well as add a new area that they believed affected self-efficacy (Usher & Pajares, 2006). The four original areas are: a) mastery experience, b) vicarious experience, c) social persuasions, and d) emotional and physiological indexes. The researchers, as part of their study, added a fifth area, invitational approach, to determine if it also had an impact on building and creating self-efficacy. Invitational theory is the idea that intentionally sent positive messages will have a positive effect on a person emotionally. The researchers also wanted to determine how these areas are influenced by race and gender (Usher & Pajares, 2006).

The study was conducted with 468 6th grade student in the Southeastern part of the United States. There were 263 Caucasian students, 165 African American students, 21 Hispanic students, 9 Asian students, and 10 students of other ethnicities. The students were in two different schools. One school had 31% of the students qualifying for free and reduced lunch and the other school had 17% of the students qualifying for free and reduced lunch. The students

were given a survey during one reading class period. Teachers were not present during administration of the survey and students were given verbal instructions on how to complete the task (Usher & Pajares, 2006).

The results are consistent with the idea that self-efficacy is impacted and correlated with the four original areas created by Bandura. The researchers also found that invitational theory also positively correlated with the student's self-efficacy in academics. They also found that girls reported social invitations impacted their self-efficacy more than boys. Similarly, African American students also reported that invitations impacted their self-efficacy more than white students (Usher & Pajares, 2006). More specifically, the four original areas accurately predicted self-efficacy in boys, while all four with the exception of vicarious experience accurately predicted self-efficacy in girls. For both groups invitation from both self and others also had a positive impact on boys and girls with girls reporting a more significant impact (Usher & Pajares, 2006).

When the researchers specifically looked at race, they included only Caucasian and African American students. When analyzing the data from the Caucasian students the researchers found that all four of the original areas positively impacted self-efficacy. African American students' self-efficacy was shown to be impacted by all the original areas with the exception of vicarious experiences (Usher & Pajares, 2006). Both Caucasian and African American student's self-efficacy was positively impacted by inviting self and inviting others with the invitation theory having greater impact on African American students. The researchers also found that all students' self-efficacy, with the exception of African American students, was impacted by the physiological state, with the lower the anxiety associated with higher self-efficacy (Usher & Pajares, 2006).

The results of this study can help teachers in the classroom. The study confirms and adds to the research about Bandura's original four sources of building and creating self-efficacy. If teachers understand that experiencing mastery, having a non-anxious physiological state, a vicarious experience, and positive social persuasions can build self-efficacy teachers can work at creating a classroom that builds each one of these areas. This study also adds the positive invitations from both self and others can have a positive impact on the self-efficacy of each student. If teachers pay particular attention to the positive invitations they are saying, particularly to girls and African American students whose impact is felt the greatest, it will foster the growth of positive academic self-efficacy (Usher & Pajares, 2006).

School-wide Strategies to Increase Self-efficacy

It is important for teachers to use curriculum and utilize strategies that will increase the self-efficacy of their students. Self-efficacy can be influenced by the individual, the teacher, and as some researchers are finding, the school environment itself. These strategies may work best when the whole school community is working toward increased self-efficacy. McMahon, Wernsman, and Rose (2009) wanted to study the relationship of classroom climate, school belonging and self-efficacy for the subjects of language arts, math, and science. The studied 149 low-income 4th and 5th grade students in San Francisco, California. The students had one main classroom teacher throughout the year who taught them language arts and math. At both schools the majority of the students were eligible for free and reduced lunch. The majority of students at one school was 54% Latino and the majority at the second school was 43% African American with Asian, Caucasian and Filipino making up the rest of the student population (McMahon et al., 2009). These numbers show that the student population the researchers studied was a diverse, urban population.

The researchers developed their own survey instruments and trained the classroom teachers in administration (McMahon et al., 2009). The used measures about classroom environment, school belonging, and academic self-efficacy. The students were surveyed at the beginning and end of the school year. The students were also instructed that their answers would be confidential and that the measures were not a test (McMahon et al., 2009).

The researchers found three main results. The first was satisfaction, cohesion, and school belonging are all positively correlated. Meaning, if one of these factors goes up in a student or community it is likely that the others will as well. The second result was that difficulty, competitiveness, and friction are also positively correlated amongst themselves. The third, and possibly more important, result was the first two conclusions are negatively correlated with each other (McMahon et al., 2009). Essentially, the more satisfaction, cohesion, and school belonging an environment has, then students feel less competitiveness and friction amongst each other and less academic difficulty overall. The researchers also found the language arts self-efficacy in particular was positively correlated with satisfaction, cohesion, and school belonging (McMahon et al., 2009). This may indicate that if schools focus on high academic literacy rates for all the students, the overall satisfaction, cohesion, and school belonging could also increase. On the other end of academics, math and science self-efficacy were negatively correlated with difficulty (McMahon et al., 2009). Their results also showed that positive math self-efficacy was correlated with positive language arts self-efficacy (McMahon et al., 2009).

The researchers suggest that a positive classroom environment and the feeling of belonging in school are indeed factors in supporting a student's academics (McMahon et al., 2009). Positive environments fostered positive self-efficacy in language arts (McMahon et al., 2009). The researchers suggested that difficulty was the main impact on self-efficacy in

mathematics and science (McMahon et al., 2009). The results show how important it can be for students to feel like they belong. The results also may suggest that if self-efficacy in the language arts in raised, it may have a positive impact on the self-efficacy of mathematics and science. With difficulty of academic content being the main factor in self-efficacy, as the authors' results suggested, it will be important for teachers to help the students understand the material and what is being asked of them as much as possible.

Theories of Intelligence

Teaching strategies can also include a shift in the way one talks and refers to learning not only to other teachers but also to students. The teacher can and should create a classroom atmosphere of a positive mindset, specifically of a growth-mindset as laid out by Carol Dweck (2010). Dweck describes a growth mindset as a particular way of learning. She defines a growth mindset as an understanding that learning and ability can grow over time with persistence and through multiple ways. The opposite is a fixed mindset in which one believes that whatever intelligence one is born with is what is available, there is no way to get smarter (Dweck, 2010). If teachers not only believe their students' intelligence can grow but also teach their students that their own intelligence can grow, students tend to do better academically and are able to sustain more difficult work. A student may also be more willing to attempt difficult tasks if they know that it could aid them in building their intelligence (Dweck, 2010). If students can understand that they are not fixed into their smartness but can do something about how intelligent they are, it empowers the students to be in control of their own academics and growth and can likely increase their positive self-efficacy.

Dweck, Chiu, and Hong (1995) reviewed research that had been conducted on the theories of intelligence and how incremental and entity theories impacted different parts of a

student's academic life. Many of the studies they reviewed had been done, at least in part by Dweck herself. From the findings of their reviews, Dweck et al. (1995) determined that incremental theorists connected failure with lack of effort while entity theorists connected failure with one's own intelligence. Incremental theorists also determined that strategies should change in the future to be successful (Dweck, Chio, & Hong 1995). The researchers were able to determine that even if entity theorists even failed a single task, it would impact their overall affect and belief that they could be successful. Entity theorists also would prefer to go after achievement goals to determine a final score as oppose to a performance goal were going on a journey of learning is more important (Dweck et al., 1995). According to their findings, entity theorists were also more likely to assume that a person's traits at one point would continue, even if the traits were negative. Where an incremental theorist would assume that a person's traits could change and become more positive over time (Dweck et al., 1995). They also found that entity theorists were more prone to punishment if a person or child acted out where an incremental theorist would be more likely to desire to determine why a person or child acted in a certain way and find a way to work out the negative behavior (Dweck et al., 1995). Similarly, incremental theorists believe positive behaviors can be taught and learned to produce more positive behaviors, or simply students and people can change their behaviors once they are taught appropriate ones (Dweck et al., 1995).

These findings can support both teachers and students with the idea that if a teacher is more of an incremental theorist he or she can teach students appropriate behaviors and learning strategies. In the same way a student can learn from the incremental theorist perspective that failure does not mean they cannot learn how to do an academic task or behavior correctly.

Dweck has spent much of her professional life researching different aspects of implicit theories and how they impact our approach to learning. One study was conducted to determine if a student's theory about their own intelligence impacted their longitudinal academic success. Blackwell, Trzesniewski, and Dweck (2007) conducted two studies to understand implicit theories and their relationship to achievement. The first study was a long-term study with 7th and 8th graders observing their academic achievement over the course of their middle school years. The researchers wanted to look further into two things. First, how the theory of intelligence each student possesses is related to his or her achievement. The theories of intelligence studied were incremental theory being based on a growth or malleable mindset and an entity theory being based on a fixed mindset (Blackwell et al., 2007). Second, they wanted to determine why the theory of intelligence is related to grades (Blackwell, Trzesniewski, Dweck, 2007).

The researchers with 373 from four different cohorts entering 7th grade at a public secondary school in New York city. The group of students was fairly evenly varied among ethnicity with the majority of the students identifying as African American (Blackwell et al., 2007). The students filled out a survey during the fall of their 7th grade year. The researchers were measuring the student's achievement in relation to their theory of intelligence, learning goals, effort beliefs, and helpless response to failure (Blackwell et al., 2007). At the end of both the 7th and 8th grade years the researchers were given the mathematics grades of the students that were then compared with the original survey questions (Blackwell et al., 2007).

The results of the study showed that an incremental theory mindset had a positive impact on effort, learning goals, and strategies. It also led to lower helpless attitudes (Blackwell et al., 2007). Blackwell et al. (2007) also found that a student's theory of intelligence was a significant predictor of success in mathematics after two years. If a student had an incremental theory of

intelligence they had earned higher grades at the end of their 8th grade year compared to their peers who had an entity theory of intelligence. Similarly, results showed that even if students had similar achievement abilities at the beginning of their 7th grade year, the student with an entity theory of intelligence would likely have lower academic grades by the end of their 8th grade year (Blackwell et al., 2007). When the researchers looked into why this pattern existed they found having an incremental theory resulted in positive motivational patterns, which in turn, led to higher grades at the end of 8th grade (Blackwell et al., 2007).

The second study Blackwell et al. (2007) conducted was to teach the incremental theory of intelligence to students to understand if understanding the theory had any impact on students and their achievement. The researchers worked with 91 students in the 7th grade class from a different New York City secondary school than the first study. The students were split into two groups, 48 students were placed in the experimental group and 43 were placed in a control group. Both groups were taught similar workshops with the experimental group being taught about the theory of intelligence focusing on the idea that one can make new connections in the brain and intelligence can be developed. These lesson were taught during eight 25 minute sessions (Blackwell et al., 2007). To determine how the workshops impacted students, the researchers assessed the students recall and comprehension of the workshop material, any changes to the student's theory of intelligence, teacher assessments, and achievement outcomes (Blackwell et al., 2007).

The results from the second study showed that students in the experimental group had a greater change in believing incremental theory to be true over entity theory. Data from the blind teacher assessments indicated 27% of the students in the experimental group presented more motivation in the classroom (Blackwell et al., 2007). The researchers identified a traditional

trend of mathematics grades suffering and dropping as students' progressed through junior high, but after the study and experiment was completed the researchers found that within a few months, students in the experimental group had stopped their downward academic grades (Blackwell et al., 2007).

These two studies show that not only does having an incremental (or growth) view of intelligence impact grades over time, but that students can be taught about the two theories. Once students are taught the theories, belief in the incremental theory can begin to positively impact student achievement. Teachers and educators can work with students on what they personally believe of intelligence. Teachers can teach the intelligence theories with intent that students can begin to have more success academically.

Carol Dweck's work has pushed some educational researchers into looking further at theories of intelligence and self-efficacy. One study was conducted by Baird, Scott, Dearing, and Hamill (2009). They created a study to focus specifically on students labeled with a learning disability (Baird, Scott, Dearing & Hamill, 2009). The researchers wanted to begin to understand if students with learning disabilities have issues with motivation and academic performance beyond what may be considered a part of their disability.

The researchers worked with 1,518 sixth through twelfth graders from rural school districts. The students ages were from 10-19 and nearly all were Caucasian (96%). Out of the 1,518 students 107 of the students had been identified at having a learning disability (LD), while 1,411 were not identified with a LD. Both school districts used a discrepancy model to identify students with LD for special education services. (Baird et al., 2009). The researchers gathered information from students using a questionnaire, which the students took 15 minutes to complete. The questionnaire had four sets of questions for the students to answer in the following

categories: academic self-efficacy, theories of intelligence, learning versus performance goal preference scale, and effort attribution scale (Baird et al., 2009).

Results of the study show that students with a learning disability tend to have lower self-efficacy, are less adaptive at exerting effort into learning tasks, have lower performance for learning goals, and view intelligence as less incremental (Baird et al., 2009). Students with disabilities were twice as likely to prefer performance based goals over learning based goals to their peers without disabilities. The study also indicated that students with LD were more likely to view intelligence as fixed trait they were born with as oppose to their non-disabled peers who had more of a tendency to view intelligence as a more growth or incremental trait (Baird et al., 2009). Results of the study were consistent with the researchers' hypothesis that students with LD prefer performance based goals in part because the students have lower self-efficacy and a more fixed view of their own intelligence. Their findings also indicate that students with LD will find that exerting effort in an academic setting will feel threatening possibly creating a feeling were the students believe they have a lower ability level (Baird et al., 2009).

The theory of intelligence and how students view their own intelligence is researched in many forms. Researchers are interested in what students think about themselves and how their own theories impact their learning. Stipek and Gralinski (1996) furthered the research on the theories of intelligence by researching if students have different theories of intelligence for math and science, how age impacted a student's theories, strategies, and how their intelligence impacted their goals.

The researchers collected data from 319 students (third, fourth, fifth, and sixth grade), from 32 different schools that were primarily low income schools. The students were primarily Latino, along with populations of European American, African American, Asian American, and

Portuguese descent (Stipek & Gralinski, 1996). The researchers used questionnaires the students filled out in the fall and spring of the school year. They measured intelligence, effort, and performance, grades, and used standardized achievement test scores (Stipek & Gralinski, 1996).

The researchers found that ability performance beliefs were strong predictors of academic achievement by the end of the year. They also found if a student believes a person has a more fixed intelligence, than that intelligence is stable over time and is attached to all academics areas. In other words, the researchers found that students had similar beliefs regarding their intelligence in both math and social studies (Stipek & Gralinski, 1996). The researchers also found similar correlations for student's views on intelligence within the fourth, fifth, and sixth grade populations. They felt they did not have enough data to fully explain the difference with the third grade students (Stipek & Gralinski, 1996). They also found that even though students may have had a more fixed mindset of their own intelligence, it did not influence their desire to perform at a mastery level. The researchers concluded that a student's beliefs about their own intelligence was the strongest predictor of academic achievement more than their own goal orientation or academic strategies (Stipek & Gralinski, 1996).

Educators can use this information to help students begin to change their own views on their intelligence as well as working with students to help them see the value of effort (Stipek & Gralinski, 1996). The data also shows that if students become more successful in one academic area, that success may impact other unrelated academic areas (Stipek & Gralinski, 1996). Teachers can use this to help make connections with students about how being academically successful can impact all subject areas.

Researchers began to see a connection between self-efficacy, motivation, and one's own theory of intelligence. Komarraju and Nadler (2013) wanted to better understand how

motivation, self-efficacy, and theory of intelligence affect the academic achievement of students. They wanted to explore students with high and low self-efficacy and what differences the students had (Komarraju & Nadler, 2013).

The researchers studied 407 students who were recruited from an introduction to Psychology course for course credit. The students were to complete a survey in small groups or at home (Komarraju & Nadler, 2013). Most of the participants on average 20 years old, were European American, but also included African American and other ethnicities. The researchers separated their data into two studies with the second study adding the data of GPA from those students who provided it. The survey's the students took measured motivational strategies and orientations, learning and management strategies, and theories of intelligence surveys (Komarraju & Nadler, 2013).

The results showed that students with a lower self-efficacy had a statistically significant difference in theory of intelligence more often having an entity (or fixed) theory of their own intelligence. Students with high self-efficacy had a stronger tendency to believe that intelligence can change and grow over time (Komarraju & Nadler, 2013). If students had a high self-efficacy the researchers theorized that they were more motivated and had better academic outcomes. They also suggested from their findings that students are able to be more self-disciplined, motivated, and understand their efforts when a task become difficult (Komarraju & Nadler, 2013).

The results could help educators understand what may motivate students. If students believe they have the ability or have the capability to learn they will be more motivated to attend to the task. If students believe they can grow their intelligence from completing the task the students may be more willing to sustain effort when a task becomes difficult.

Intelligence and poverty. When students live in poverty, they tend to struggle academically in school. Claro, Paunesku, and Dweck (2016) wanted to look at how theories of intelligence impacted the effects of poverty, if at all. They also wanted to find and understand any relationship between poverty and having an entity or more fixed mindset. They collected data from all 10th grades students in the country of Chile. Public schools in Chile in 2012 surveyed all 10th graders, including aspects of student's mindsets about their intelligence (Claro, Paunesku, & Dweck, 2016). The number of students surveyed was just over 168,000 students with 98% of the 2,392 public schools participating (Claro et al., 2016).

The data the researchers collected and analyzed showed that poverty was the strongest predictor of academic success among all socioeconomic variable (Claro et al., 2016). They also found that at every economic level, those students who had an incremental or growth mindset did better academically than their peers. The researchers found that there was a significant positive academic connected between mindsets (growth or fixed) and achievement (Claro et al., 2016). They also found that students were twice as likely to have a fixed mindset if they came from the lowest income families. However, if a student from a low income family had a growth mindset, that student could performed at the same level as a student whose family earned 13 times more (Claro et al., 2016)

The researchers concluded that mindsets and achievements goals are similar among an entire country's socioeconomic levels. The results also showed the academic impact of coming from a low income family. Teachers and educators can take this information to help instruction in the classroom. While teachers cannot impact what socio-economic level their students come from, they can impact how a student views intelligence. If a teacher can help a student believe in more of a growth mindset it may have an impact on the overall academic achievement. This

research shows, that good teaching which includes helping students understand how to learn and that they can get better at learning, can impact students significantly.

CHAPTER III: DISCUSSION AND CONCLUSION

Summary of Literature

Self-efficacy is an important part of any student's education. The previous research has shown that having a higher academic self-efficacy will likely result in more academic success (Bandura, 1993; Hwong et al., 2015; Klassen, 2010; Pearson, 2008; Zimmerman et al., 1992). When a student has a more positive self-efficacy he or she will likely earn better grades and have a more positive outlook on his or her own education. Having a positive academic self-efficacy will likely also result in having more perseverance when a task becomes difficult or appears challenging (Bandura, 1993).

Academic self-efficacy is influenced by many factors in a student's life. Parents, socioeconomic status, and individual self-perceptions are among the influencers of self-efficacy (Bandura et al., 1996; Kerpelman et al., 2008). Teachers and educators cannot change some of these influences on academic self-efficacy, but they can impact certain aspects of the mindset. Teachers can influence the curriculum, regulatory skills, social skills, and school environment that all impact academic self-efficacy (Aydin, 2015; Bandura et al., 1996; Cheung & Lai, 2013; Klassen, 2010).

The previous research has shown that academic self-efficacy impacts learning in different ways. Having a higher academic self-efficacy can result in higher academic motivation which may result in academic success. (Aydin, 2015; Komarraju & Nadler, 2013). If students, however, do not see themselves being successful at a task or have experienced failure in the past they may even be unwilling to perform an academic task (Aydin, 2015).

It is important for educators to understand that previous academic successes or failures, including grades, impact academic self-efficacy (Zimmerman et al., 1992). Students will walk

into a school and classroom with a belief in how they will perform in the class with much of the basis on previous academic work. Students may even interpret whatever class or task they are undertaking as a threat if they feel they won't be successful at it (Long et al., 2007). Low academic self-efficacy can also have an impact on the academic goals the explicitly or implicitly have for themselves and will impact their future academic plans (Zimmerman et al., 1992).

The previous research also showed that students with diverse backgrounds have other influences on their academic self-efficacy. When students with a diverse racial background feel as if their ethnic identity is valued by the school and within the classroom it will have a positive impact of the academic self efficacy (Kerpelman et al., 2008; Long et al., 2007). When diverse students are encourage to not only be a part of the community but help build and influence the educational community of the school and classroom they will likely have more positive academic self-efficacy (Martin, 2011; Uwah et al., 2008). One way to help build respect and positive regard for a student's ethnic identity is to have good culturally relevant curriculum. Students may feel more connected to their learning, be more motivated to participate, and likely have increased academic self-efficacy (Kelly et al., 2015).

The previous research also showed how students with disabilities' academic self-efficacy is impacted in ways their non-disabled peers don't experience. Students with disabilities tend to show more helplessness and have lower academic expectations for themselves (Valås, 2001). However if the students are taught ways to build their academic skills and self-efficacy, especially in boys who tend to have a lower academic self efficacy, it can possibly increase their overall academic self-efficacy (Klassen, 2010; Valås, 2001).

The previous research showed that there are many ways for teachers to influence and build the academic self-efficacy of their students. One way is to build moments within the

learning of the class that will result in successful moments for the students (Klassen, 2010). Once students have a positive, authentic academic success they will build their self-efficacy. Teachers can also influence students by intentionally and authentically giving students positive academic messages (Usher & Pajares, 2006). Teachers can focus moments and activities in their classroom to specifically building community and specifically building self-efficacy (Cheung & Lai, 2013; McMahon et al., 2009). When certain activities are less focused specifically on academics but more focused on academic self-efficacy it can help influence students for building a more positive academic self-efficacy.

Similarly, if teachers have times in which they are focused on building strong academic strategies for learning that will also likely increase academic self-efficacy (Cheung & Lai, 2013; Garcia-Sanchez & Fildalgo-Redendando, 2006). More specifically, if students are taught less what to learn and more strategies to learn that will increase their overall academic self-efficacy. Especially focusing on reading skills and strategies. The skills of reading can connect with nearly all academic tasks and can play a part in increase academic self-efficacy for all subjects (Cheung & Lai, 2013; McMahon et al., 2009).

Finally, another influence on academic self-efficacy is one's theory of intelligence, specifically, if a student has an entity (fixed mindset) theory of intelligence, they will likely have lower academic self-efficacy (Dweck et al., 1995; Komarraju & Nadler 2013; Stipek & Gralinski, 1996). If a student subscribes more with entity theorist mentality, they will likely struggle more in school (Dweck et al., 1995). However, students can be taught so that the move from a more entity theorist (fixed mindset) to an incremental theorist (growth mindset) (Blackwell, 2007). This can especially impact the self-efficacy effects of students with a learning disability (Baird et al., 2009). If a student has a growth mindset it can even counteract the

academic self-efficacy effects that poverty can have and students may be more academically successful (Claro et al., 2016).

Limitation of Research

The previous research in this paper has limitations. First, as with all research data collected from lessons, it is difficult to ascertain how much was impacted by the ability and skill of the individual teachers. Even if the person teaching students was trained specifically for the task the students were to perform, how well a teacher explains the information and how well they connect with the students is difficult to calculate. It can be difficult to collect data on why a particular teacher was better than another at teaching a subject or skill.

A second limitation of the research is the lack of information on diverse learners. While a few of the research studies were conducted with African-American, Hispanic, or Asian cultures, they were mostly done outside the United States. A particularly population lacking data is immigrant populations to the United States.

Another limitation to the research data is how great the impact was from the strategies discussed on self-efficacy. The data showed that some strategies did have an impact, but how large was not always thoroughly explored. Along the same lines, there was a lack of information about the long-term effects of many of the strategies discussed. The data from the previous research was collected often within the same school semester or possibly within the same school year. Few research studies collected data over the high school or middle school careers of the students.

Finally, there was missing information into how a parent's influence really impacted a student's self-efficacy. Many research studies addressed that parents had an important role in

building a student's academic self-efficacy, but little was discussed as to how that happened or how teachers could utilize that for the benefit of the student.

Implications for Future Research

The previous studies can lead researchers into many other areas of study. First it would be important to continue to research on what specific strategies help build academic self-efficacy. It would also be important to learn what a particularly good teacher does and how their teaching strategies impact the self-efficacy of their students. One way this could be done is to perform interviews with students as opposed to paper and pencil surveys. While it would be difficult to gather a great deal of data, the information collected would be in-depth and could shed light onto how a good teacher connects and builds the self-efficacy of their students.

Another area for further research is how culturally relevant curriculum impacts and builds the academic self-efficacy of the students. Teachers and educators would find the information helpful with selecting curriculum for their classes. If educators understand what curriculum can best connect with their students, the teachers can continue to build the academic self-efficacy in the classroom.

Finally, an area for future research on academic self-efficacy is the impact of poverty and self-efficacy. It was briefly discussed in the above research studies, but more needs to be researched to understand to full impact of poverty on self-efficacy and what teachers and educators can do about it.

Implications for Professional Application

Self-efficacy is an important part of a student's academic process and learning. The previous research shows that having positive self-efficacy will often result in positive academic outcomes and even more challenging academic goals. It is then imperative that teachers,

educators and school personnel work on fostering, building, and influencing the academic self-efficacy of the students within the school walls.

There are many ways in which a teacher can influence and build positive academic self-efficacy in students. To start with, a teacher should seek to learn how students see themselves, where are the students starting from. Teachers should seek to know if their students enjoy their subject or, more specifically, seek to understand the individual student's self-efficacy of the subject. As a teacher is learning more about their students, he or she can begin to point out strengths even if the teacher does not yet know much about the student. Along with this idea, teachers should also create situations and moments in which a student can experience success and then be praised for their efforts. If a student has started out their relationship with the teacher and the curriculum as successful, that will be a positive starting point and building good academic self-efficacy.

Teachers also need to understand how much some students outside life impacts a student's classroom experience. The previous research shows that a student's family can greatly impact their self-efficacy. A teacher should try to understand what outside forces impact their students as well as hold high expectations and work on building the self-efficacy inside the classroom walls.

Teachers and educators should also build an environment in their classroom in which all students feel welcome and all students feel welcome. Students should feel safe to make mistakes and when it happens a focus for change should be on the effort they put in. The environment of the classroom and even the school building itself should feel welcoming to all students. Students should feel as if their voice is being heard and welcome in the classroom. If students are more connected to the community of the classroom and the school, they will feel more connected to

building their self-efficacy. If students understand that who they are and where they come from is welcome and encouraged in the classroom, their academic efforts will increase as well as their academic efficacy. Students should be able to easily connect with the curriculum being taught and be able to see themselves and their culture positively represented in the curriculum. The research has shown that if students connect with an academic task they will be more motivated to attempt the task and be more successful.

Another way teachers and educators can increase the academic self-efficacy of students is to spend time on learning the strategies of being academically successful along with the specific learning tasks. The above research shows that many students struggle to feel as if they even understand the strategies they are expected to perform. If a teacher takes the time to help students understand that specific strategies that will be used over many tasks as opposed to just one, that will continue to build the academic self-efficacy of the students. The previous research also indicates that building the academic self-efficacy of English and reading skills tends to positively impact other subject areas as well. Reading is an incredibly large part of everyday life, and if students have a positive self-efficacy about those skills it can positively impact the overall academic self-efficacy.

Finally, teachers and educators can help students understand that even if a task is a challenge that does not mean they are bad at a task or unintelligent. Teachers can help students find the small successful moments and build on those. The previous research shows that this is especially important for students who are identified as having a lower ability for a skill or having a learning disability. Students tend assume that they are simply bad at a task, and there is nothing they can do about it. Teachers should encourage and challenge students to persist even when difficult. Teachers should help students identify the positive effort they are putting forth. As

students experience each academic success, even if it is small, they will be able to build their academic self-efficacy and see themselves as successful in academics.

Conclusion

I often think about Ian and other students like him that have walked into my classroom. These students can struggle so much at even deciding they want to attempt a task. Especially as students are going through high school, in my experience, they have often gone through years of being pulled out and feeling labeled as having lower skill. I wanted to research and find why my students feel that way and, more importantly what I can do about that. Through this research process, I do not think I have found or learned anything life changing, but confirmation and a more in depth knowledge of how to help and guide students in building self-confidence and academic self-efficacy. My students can build their self-efficacy if I can make the curriculum relevant to them and if they feel welcome and a part of the community. The research from this paper has also shown me that I also need to make sure parents feel comfortable to walk their child through the academic system. The research shows that students need to experience success to feel like they can make academic goals for a successful future. The research has also shown that students can be taught that they can learn to learn, as opposed to they know what they know and there is nothing they can do about it. I want students to experience community and success in my classroom and hopefully, we can continue to build their academic self-efficacy.

References

Aydin, S. (2016). An analysis of the relationship between high school students' self-efficacy, metacognitive strategy use and their academic motivation for learn biology. *Journal of Education and Training Studies, 4*(2), 53-59. doi:10.11114/jets.v4i2.1113

Baird, G. L., Scott, W. D., Dearing, E., Hamill, S. K. (2009). Cognitive self-regulation in youth with and without learning disabilities: academic self-efficacy, theories of intelligence, learning vs. performance, goal preferences, and effort attributions. *Journal of Social and Clinical Psychology,* 28(7), 881-908. doi: 10.1521/jscp.2009.28.7.881

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148. doi:10.1207/s15326985ep2802_3

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change *Psychological Review, 84*(2). doi: 10.1037/0033-295X.84.2.191

Bandura, A., Barbaranelli, C., Caprara G. V., Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development, 67*(3), 1206-1222. doi:10.1111/1467-8624.ep9704150192

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, *78*(1), 246-263. doi:10.1111/j.1467-8624.2007.00995.x

Cheung, D., & Lai, E. (2013). The effects of classroom teaching on students' self-efficacy for personal development. *British Journal of Guidance & Counselling, 41*(2), 164-177. doi:10.1080/03069885.2012.721126

Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, *113*(31), 8664-8668. doi: 10.1073/pnas.1608207113

Collins, J. L. (1982, March). *Self-efficacy and ability in achievement behavior.* Paper presented at the annual meeting of the American Educational Research Association, New York.

Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology, 88*(4), 715-30. doi: 10.1037/0022-0663.88.4.715

Dweck, C. (2010). Mind-Sets and Equitable Education. *Principal Leadership, 10(5),* 26-29. Retrieved from:http://mtsspresmat.wiki.inghamisd.org/file/view/Growth+Mindset+article.pdf/544395350/Growth+Mindset+article.pdf

Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological inquiry*, *6*(4), 267-285. doi: 10.1207/s15327965pli0604_1

Elliot, A. J., & Harackiewicz, J. M. (1996). Approach and avoidance goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 70,* 461-475. http://dx.doi.org/10.1037/0022-3514.70.3.461

Flavell, J. (1979). Metacognition and cognitive monitoring: A new area of cognitive-devel-opmental inquiry. *American Psychologist, 34,* 906-911. http://dx.doi.org/10.1037/0003-066X.34.10.906

Garcia-Sánchez, J., & Fidalgo-Redondo, R. (2006). Effects of two types of self-regulatory instruction programs on students with learning disabilities in writing products, processes, and self-efficacy. *Learning Disability Quarterly, 29*(3), 181-211. doi: 10.2307/30035506

Graham, S., & Harris, K. R. (1987). Improving composition skills of inefficient learners with self-instructional strategy training. *Topics in Language Disorders, 7,* 66-77. http://dx.doi.org/10.1097/00011363-198709000-00008

Graham, S., & Weiner, B. (1996). Theories and principles of motivation. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 63-84). New York: Macmillan.

Hwang, M. H., Choi, H. C., Lee, A., Culver, J. D., & Hutchison, B. (2016). The relationship between self-efficacy and academic achievement: A 5-year panel analysis. *The Asia-Pacific Education Researcher*, *25*(1), 89. doi: 10.1007/s40299-015-0236-3

Jungert, T., & Rosander, M. (2010). Self-efficacy and strategies to influence the study environment. *Teaching in Higher Education, 15*(6), 647-659. doi: 10.1080/13562517.2010.522080

Kelley, H. M., Siwatu, K. O., Tost, J. R., & Martinez, J. (2015). Culturally familiar tasks on reading performance and self-efficacy of culturally and linguistically diverse students. *Educational Psychology in Practice, 31*(3), 293-313. doi: 10.1080/02667363.2015.1033616

Kerpelman, J. L., Eryigit, S., & Stephens, C. J. (2008). African American adolescents' future education orientation: Associations with self-efficacy, ethnic identity, and perceived parental support. *Journal of Youth and Adolescence, 37*(8), 997-1008. doi:10.1007/s10964-007-9201-7

Klassen, R. M. (2010). Confidence to manage learning: The self-efficacy for self-regulated learning of early adolescents with learning disabilities. *Learning Disability Quarterly*, *33*(1), 19-30. doi:10.1177/073194871003300102

Komarraju, M., & Nadler, D. (2013). Self-efficacy and academic achievement: Why do implicit beliefs, goals, and effort regulation matter?. *Learning and Individual Differences*, *25*, 67-72. doi: 10.1016/j.lindif.2013.01.005

Long, J. F., Monoi, S., Harper, B., Knoblauch, D., & Murphy, P. K. (2007). Academic motivation and achievement among urban adolescents. *Urban Education, 42*(3), 196-222. doi: 10.1177/0042085907300447

Martin, A. J. (2011). Courage in the classroom: Exploring a new framework predicting academic performance and engagement. *School Psychology Quarterly, 26*(2), 145-160. doi: 10.1037/a0023020

McMahon, S. D., Wernsman, J., & Rose, D. S. (2009). The relation of classroom environment and school belonging to academic self-efficacy among urban fourth-and fifth-grade students. *Elementary School Journal, 109*(3), 267-281. doi: 10.1086/592307

Pearson, M. M. (2008). Voices of Hope. *Education & Urban Society*, *41*(1), 80-103. doi: 10.1177/0013124508316743

Schunk, D.H., & Zimmerman, B. J. (1997). Social origins of self-regulatory competence. *Educational Psychologist, 32,* 195-208. http://dx.doi.org/10.1207/s15326985ep3204_1

Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education, 23,* 1086-1101. http://dx.doi.org/10.1016/j.tate.2006.07.011

Steele, C., Spencer, S., & Aronson, J. (2002). Contending with group image: They psychology of stereotype and social identity and threat. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 379-440). New York: Academic Press. http://dx.doi.org/10.1016/S0065-2601(02)80009-0

Stipek, D., & Gralinski, J. H. (1996). Children's beliefs about intelligence and school performance. *Journal of Educational Psychology*, *88*(3), 397. doi: 10.1037/0022-0663.88.3.397

Usher, E. L., & Pajares, F. (2006). Inviting confidence in school: Invitations as a critical source of the academic self-efficacy beliefs of entering middle school students. *Journal of Invitational Theory & Practice, 12*, 7-16. Retrieved from: http://files.eric.ed.gov/fulltext/EJ766998.pdf

U.S. Department of Education for Civil Rights. (2014). *Civil Rights Data Collection Data Snapshot: School Discipline* (Issue 1). Retrieved from: https://www2.ed.gov/about/offices/list/ocr/docs/crdc-discipline-snapshot.pdf

Uwah, C. J., McMahon, H. G., & Furlow, C. F. (2008). School belonging, educational aspirations, and academic self-efficacy among African American male high school students: Implications for school counselors. *Professional School Counseling, 11*(5), 296-305. doi: 10.5330/psc.n.2010-11.296

Valås, H. (2001). Learned helplessness and psychological adjustment II: Effects of learning disabilities and low achievement. *Scandinavian Journal of Educational Research,45*(2), 101-114. doi:10.1080/00313830120052705

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82-91. doi: 10.1006/ceps.1999.1016

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41(2),* 64-70. http://dx.doi.org/10.1207/s15430421tip4102_2

Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American educational research journal*, *29*(3), 663-676. doi: 10.3102/00028312029003663