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# A Mixed-Methods Investigation of How Student Goal-Setting for Improved Learner Behaviors Affects Intermediate Elementary Academic Achievement

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## A Mixed-Methods Investigation of How Student Goal-Setting for Improved Learner

Behaviors Affects Intermediate Elementary Academic Achievement

by

Meghan McNulty

A Dissertation submitted to the Education Faculty of Lindenwood University

In partial fulfillment of the requirements for the

Degree of

Doctor of Education

College of Education & Human Services

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by

### Meghan McNulty

This dissertation has been approved in partial fulfillment of the requirements for the

degree of

Doctor of Education

at Lindenwood University by the College of Education & Human Services

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## Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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#### Abstract

Education in the United States has changed significantly since its onset. Due to these changes, there is an increased need for social-emotional skills for success in school and in life. The study centered on how focusing intermediate elementary school students on improving their behavior could influence their academic achievement. Though there is much literature on social-emotional skills, self-efficacy, student agency, goal-setting, and academic achievement, few researchers have conducted studies to connect these concepts. In this study, students assessed their current behavioral skills using the mySAEBRS (Illuminate Education, n.d.). Using the results, students set improvement goals in one of three behavioral areas: social, emotional, or academic. Teachers monitored weekly check-ins on how students progressed toward those goals. The researcher collected pre- and post-academic achievement data from three benchmarking websites to determine any connection between behavioral goal-setting and academic achievement. The individual results for students who set goals in the three areas (social, emotional, and academic) did not show statistically significant academic growth. Likewise, in comparing those that set goals using the prescribed process and those that did not, there was no statistically significant difference between the two groups. Themes emerged related to the drastic toll the COVID-19 pandemic had on students' academic and social-emotional progress, as well as the continued need for social-emotional skill instruction and individualization of learning. Further study is needed to determine the actual impact goal-setting for behavioral improvement may have on academic achievement.

*Keywords:* goal-setting, academic achievement, self-efficacy, social-emotional learning, agency, behavioral improvement, COVID-19, pandemic.

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#### **Chapter One: Introduction**

#### Introduction

The purpose of schools in the United States has evolved since their inception. In the earliest time in education, schools served to continue instruction around religious beliefs (Kober et al., 2020). Bandura (1997) declared that there was a change from control by supernatural events to people being able to control their lives. Additionally, Kober et al. (2020) stated that the goal of the United States government was to have a more educated citizenry (Kober et al., 2020). In recent years, legislators and society have placed growing importance on academic achievement and how that achievement can be measured and grown (Loss & McGuinn, 2016). At the elementary level, that importance is particularly true in the intermediate grades (3–5).

Standardized tests and other benchmark assessments are the most often used measures to determine academic achievement, and incredible pressure has grown to improve assessment results to demonstrate increased learning (Loss & McGuinn, 2016). According to Durlak et al. (2011), as legislators and society have challenged educators to improve student academic performance, despite limited time and a lack of resources available to address diverse student needs, prioritization and effective implementation of programs for maximum benefit has become a difficult, but paramount, task for schools. Since the ultimate goal of schools is to help students learn, understanding how learning can improve is at the forefront of educators' minds. Most recently, the learning trend has moved toward learners' behaviors, namely Social-Emotional Learning (SEL), and how improving these skills may lead to more significant learning and overall success (Weissberg et al., 2015).

#### Social-Emotional Learning

According to Weissberg et al. (2015), utilizing SEL became much more prominent in recent times. The Collaborative for Academic, Social, and Emotional Learning (Collaborative for Academic, Social, and Emotional Learning [CASEL], n.d.) defined SEL as:

The process by which all young people and adults acquire and apply the knowledge, skills, attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. (para. 1)

Durlak et al. (2011) declared that success depends on early learning of the skills that can help people forge meaningful relationships, make positive decisions, and adjust well to change. There is a significant amount of literature on SEL for elementary students, how to improve these skills, and the possible connections that different SEL skills have to academic outcomes. School systems recognize that improving specific skills, such as self-awareness, self-management, relationship skills, social awareness, and decisionmaking, can help students control their impulses and increase their self-confidence to improve their academics (CASEL, n.d.; Durlak et al., 2011.; Esen-Aygun & Sahin-Taskin, 2017; Kanopka et al., 2020; Payton et al., 2008). SEL can be particularly effective for traditionally more at-risk students, such as students learning English (Asakereh & Yousofi, 2018) and those from diverse backgrounds (Durlak et al., 2011).

Additionally, Durlak et al. (2011) noted that students who feel disconnected from school become increasingly disconnected as they age. Successfully implementing SEL

can help students feel they belong to a community and mitigate unsuccessful choices these children may make as they age (Durlak et al., 2011).

Schools have the unique and essential opportunity to impact students' SEL development alongside their academic learning (Durlak et al., 2011). Many educators sought to identify the most impactful approach for improving SEL skills and academic achievement. Developing students' beliefs about what they can control, including their academic capabilities, could be an avenue for SEL improvement and academic growth. *Self-Efficacy* 

Bandura (1997) defined self-efficacy as the belief someone has about their capabilities to achieve and what is in their control. Ratsameemonthon (2013) found a close link between students' self-efficacy and academic achievement and success. Bandura (1997) believed students could govern their choices to positively influence and prevent adverse outcomes. In addition, through positive or negative feedback, educators can respectively increase or decrease students' feelings of self-efficacy (Bandura, 1997). Regardless, students and educators need to understand they have the power to change, in order to take action Bandura, 1997). Schunk (1996) noted that educators' feedback can increase students' feelings of self-efficacy. Still, students actually have to be able to follow through with success for higher self-efficacy contributes to students' feelings that they can impact the world. Learners develop and try out their abilities to learn to navigate the situations they might encounter independently (Bandura, 1997; Richardson, 2017). One way to engage learners in developing the ability to act as change agents in their lives is through goal-setting.

#### **Goal-Setting and Intention**

Research has indicated that when people have more ownership of their learning, they have a stronger direction and actions to reach their learning goals. Ryan (1970) declared that learners could deliberately affect outcomes. For example, Ryan (1970) noted that students and educators could manipulate intentions by setting up specific situations or giving specific instructions. Dotson (2016) agreed with Ryan, noting that students can achieve success when they focus on an outcome and have a direction to achieve that outcome. Additionally, Sides and Cuevas (2020) connected goal-setting to academic progress, noting goal-setting's inherent effect on social-emotional factors. In other research, the Midwest Comprehensive Center (2018) suggested that goal-setting develops motivation, agency, and helps students with organization. However, correct implementation of goal-setting is imperative for students to receive full social-emotional benefits. Schools have recently focused on individual learners by supporting student goalsetting for increased academic and SEL. This focus satisfies the need for differentiation and validates that people learn at different paces (Colby, 2018). Furthermore, according to Colby (2018), competency-based educational practices engage students in their learning, increasing students' accountability and responsibility for their progress. Through this process, students develop soft skills necessary for personal success (Colby, 2018). Bandura (1997) reiterated, "By exerting influence in spheres over which they can command some control, they are better able to realize desired futures and to forestall undesired ones" (p. 1). As learners have more ownership, their self-efficacy increases

(Bandura, 1997), which leads to a better understanding of what and how they learn (Colby, 2018). Specifically, goal setting raises self-awareness, self-management, and self-efficacy (Sides & Cuevas, 2020). This ownership gives students stronger direction and clear actions allowing them to succeed in reaching their learning goals (Ryan, 1970).

#### Statement of the Problem and Rationale of the Study

Though many researchers have examined goal-setting to improve academic achievement, few have found a connection between how student goal-setting for socialemotional skill improvement may affect academic growth (Kanopka et al., 2020). The lack of literature is particularly true at the elementary school level for intermediate grades (3–5), as noted by Side and Cuevas (2020). This gap in the literature indicated a need for students to set goals with action steps related to their deficits in behavioral areas connected to learning (academic, social, and emotional) and to note the increase, if any, in academic achievement. Past researchers found that connections existed between student behavior, agency in changing their behavior, and how that impacts their ability to show their learning in academic tasks. However, researchers have yet to do so in a study. Therefore, this study focuses on how students' goal-setting to improve their behaviors as learners will positively impact their learning, as measured by academic achievement data. As more schools move toward implementing SEL programs, recognizing their need, and involving more students in their learning through competency-based learning programs, research has a notable space on how these SEL improvements impact academic learning. How does student goal-setting for improved behavior positively impact academic achievement?

#### **Purpose of Study**

This study was to investigate how student goal-setting for behavioral improvement impacts academic achievement for intermediate elementary (3–5) students. Specifically, this study aimed to identify if student goal-setting for social, academic, or emotional behavioral improvement based on a social-emotional self-assessment increases academic achievement.

#### **Research Questions and Hypotheses**

**Research Question 1**: How does student goal-setting for improved social behavior increase academic achievement?

**Research Question 2**: How does student goal-setting for improved academic behavior affect academic achievement?

**Research Question 3**: How does student goal-setting for improved emotional behavior increase academic achievement?

**Research Question 4**: How does student goal-setting for improved behavior affect academic achievement?

**Hypothesis 1**: Student goal-setting for improved social behavior increases academic achievement.

**Hypothesis 2**: Student goal-setting for improved academic behavior increases academic achievement.

**Hypothesis 3**: Student goal-setting for improved emotional behavior increases academic achievement.

**Hypothesis 4**: Student goal-setting on learner behaviors increases academic achievement.

This research is valuable because educators are constantly looking for ways to increase the likelihood of learning, and this research aimed to find a way to do that. With growing interest in how the connection between social-emotional factors and academic success could lead to greater achievement, this study sought to use that link to engage students in developing positive learning behaviors. With the intent to support improved student agency in learning, with greater academic outcomes, the research could influence the studies of others and the processes used in schools. Using a prescribed procedure to set goals brought awareness and intentionality to areas needing improvement for those who took part in the process. The potential benefits to society and the field of education are that increased awareness and ownership could lead to more effective academic outcomes, something for which educators and society are always searching, leading to more informed and productive citizens. According to the Midwest Comprehensive Center (2018), learners who set goals will likely feel more ownership in their learning. Consistent goal-setting directly benefits students. With goal-setting, the students have control and direction over improving their learner behaviors. In addition, there is a possible benefit of seeing improved academic progress and better social development, which could lead to more productive and successful adults.

#### Limitations

#### Sample Demographics

The sample demographics provided a limitation to the results of the study. For example, the study included purposive sampling; according to Fraenkel et al. (2023), the major disadvantage of purposive sampling is that the researcher could have incorrectly estimated the sample's representativeness or expertise regarding needed information. In

this study, the intermediate elementary students attended a school in a suburban setting in a lower-socioeconomic area. The study research site participants might have provided limitations, due to experience ranges, age, cognition related to executive functioning abilities, and the outside stressors experienced because of living in impoverished circumstances. Researchers noted developing executive functioning skills based on age and range of experiences, as reasons that previous research was limited, as students potentially rated themselves based on what they believed their teachers would want (Otgonbaatar, 2021). Study participants received free breakfast and lunch through a program created during the pandemic to support all students. Because of this, the school has a 100% free and reduced lunch rate (Comprehensive School Data System, n.d.), though, even before the pandemic, the free and reduced lunch rate was at 100% (Comprehensive School Data System, n.d.). Chronic stress from living in poverty, having a caregiver or caregivers work multiple jobs, and not always eating nutritious food at home has an impact on family transiency, and physiological and emotional factors, all of which can impact effort, focus, and motivation that affect achievement (Leusse, 2016). Finally, several students from the sample demographics did not speak English at home. Various levels of language acquisition were another possible limitation to certain students in the sample demographic. The study included supports, such as a low readability level and guides for analyzing their assessment results to combat these sample limitations. Additionally, the supports included definitions for words that were higher level.

Various timing limitations may have impacted the study. Goal-setting occurred before Spring Break, creating a data gap for student check-ins. Although a planning gap existed, goal-setting occurred closer to Spring Break. Another limitation of this study included impacts of the COVID-19 pandemic, including students' academic loss and mental health concerns (Jones et al., 2022). Students missed significant learning the previous year, as they did not have full in-person learning. The social separation from peers and lack of practice with handling conflicts and effectively communicating might have significantly affected the mental health of students and their ability to succeed in school (Centers for Disease Control and Prevention [Centers for Disease Control], 2023; Grygarová et al., 2022; Guazzini et al., 2022; Tortella et al., 2021). That impact could have limited the research, due to behavioral interruptions and additional time necessary for social skills instruction. Furthermore, teachers needing additional test preparation time during the study, unverified teacher autonomy, and no measure of effective implementation of the prescribed goal-setting process and delivering the curriculum could have affected student learning and achievement.

Additionally, another limitation included the length of time the study lasted. The study lasted for approximately eight weeks. Overall, different timing limitations in the study may have impacted the effectiveness in demonstrating connections between prescribed goal-setting processes and successful academic outcomes. The researcher put academic and social-emotional supports in place for students to combat these time limitations. Beyond responsive supports, educators at the study site used counseling lessons, community circles, mindfulness, student calming areas, and buddy rooms to support social-emotional skill development. Further, school staff used academic supports and checks in the form of monthly instruction modules, weekly data team meetings, and weekly team planning.

Finally, other possible limitations included implementation fidelity by the classroom teachers and students. Connected to this limitation are potentially two others: first, the possibility that teachers believed students were incapable of participating in the activities in this study and that they did not interfere with the goal-setting, and second, that the teachers did not have their agenda around behavior, pushing students toward setting goals they wanted for them. The researcher sent teachers weekly emails with links for the students to complete at the beginning of the week, so that they could make sure to include the goal-setting check-ins in their lesson plans to combat these fidelity limitations.

#### Instrument

The mySAEBRS assessment tool, which students used to self-assess their learner behaviors in this study, is part of the FastBridge assessment platform created by Illuminate Education, Inc., through a research-based process, and based on the belief that academic achievement connects to success with social-emotional factors (Illuminate Education, n.d.). The researcher created a video to help students understand the vocabulary used in the mySAEBRS (Illuminate Education, n.d.) tool that defined and guided students through a goal-setting process. The goal-setting process was based upon the guidelines for goal-setting in the book, *Becoming an Assessment-Capable Visible Learner, grades 3–5* (Fisher et al., 2019). Students filled out weekly check-ins to keep the goals in students' minds and allow them to reflect and change their ideas.

Something that the researcher did not foresee in the process was that the mySAEBRS (Illuminate Education, n.d.) results report also included results from the SAEBRS (Illuminate Education, n.d.) report from the teacher screener. Therefore, student reports had to be created by hand so that the teacher's responses did not impact their ratings. Because of the hand creation, there was a difference from the initial intention of students having a digital printout from FastBridge (Illuminate Education, n.d.) of their mySAEBRS (Illuminate Education, n.d.) report, which could have limited the study results. However, the hand-created reports allowed students to understand their results and set goals using the process with the help of the vocabulary-defining video.

#### **Definition of Terms**

The definitions included in this section are pertinent to this study. Many definitions are directly from the Illuminate Education (n.d.) website and CASEL (n.d.). They are used widely in different programs, including in the mySAEBRS self-assessment from FastBridge (Illuminate Education, n.d.) and different SEL programs to support SEL skill development in schools.

*Academic Achievement* – Academic achievement is the attainment of goals related to education (Shehzad & Aziz, 2019).

*Academic Behavior* – Academic Behavior is the "skills necessary for students to be prepared for, participate in, and benefit from academic instruction" (Illuminate Education, n.d., para. 6).

*Agency* – Agency is the capacity to act purposefully when needed (Ferguson, 2015, as cited in Ruyle et al., 2019).

*Emotional Behavior* – Emotional Behavior is a "students' ability to regulate internal states, adapt to change, and respond to stressful/challenging events" (Illuminate Education, n.d., para. 7).

*Goal-setting* – Goal-setting is a conscious effort to achieve a specific outcome (Ryan, 1970).

*Intermediate Elementary* – Intermediate elementary students, for this study, are those in grades three through five, ages eight to 11 (Nemours Foundation, n.d.).

*Relationship Skills* – Relationship skills are the "ability to manage one's own emotions, thoughts, and behaviors effectively in different situations and to achieve goals" (CASEL, n.d., section 2).

*Responsible Decision-Making* – Responsible decision-making is the "ability to make caring and constructive choices about personal behavior and social interactions across diverse situations" (CASEL, n.d., section 2).

*Self-Awareness* – Self-Awareness is the "ability to understand one's own emotions and how they influence behavior" (CASEL, n.d., section 2).

*Self-Efficacy* – Self-Efficacy is one's belief that they "are up to the task and possess the skills and character" (Frey et al., 2018, p. 52) to do what is needed.

*Self-Management* – Self-Management is the "ability to manage one's own emotions, thoughts, and behaviors effectively in different situations and to achieve goals" (CASEL, n.d., section 2).

*Social Awareness* – Social Awareness is the "ability to understand the perspectives of and empathize with others" (CASEL, n.d., section 2).

*Social Behavior* – Social Behavior is a "students' ability to understand social norms, empathize, and understand the perspectives of others" (Illuminate Education, n.d., para. 5).

*Social-Emotional Learning* (SEL)– SEL is the way people learn and use the attitudes, skills, and understanding that allow them to manage themselves and their relationships with others and set and achieve goals and make good decisions so that they can be successful (CASEL, n.d., section 2).

#### Summary

The study focused on how students can develop their social-emotional abilities and the potential improvement this could provide to their academic achievement. The focus is important because government agencies, parents, and society expect schools to demonstrate increased learning, which puts pressure on educators to continually search for ways to demonstrate higher student achievement on standardized and benchmark assessments. Roberts (2013) declared that "academic achievement continues to be a driving issue in American education" (p. 7). Furthermore, current mental health needs from the pandemic (Jones et al., 2022) and research related to SEL (CASEL, n.d.), dictated that schools support students by helping them develop skills beyond academics to be successful in adapting to our changing world (Roberts, 2013). This study looked at how goal-setting can build student agency, self-efficacy, and accountability, related to their behaviors as a learner and how that could positively impact academic achievement. Literature exists related to the subjects included in this study. However, few studies or sources exist that specifically connect goal-setting around SEL and academic achievement changes. In 1997, Bandura declared that societies were transforming in significant and varied ways in terms of technology, socialization, and information and that these "rapid cycles of drastic changes require continuous personal and social renewals. These challenging realities place a premium on people's sense of efficacy to

shape their future" (Preface). Chapter Two includes information about the topics in this study.

#### **Chapter Two: Review of Literature**

In Chapter One, background information provided an understanding for the urgency for change in education to support students in the face of a changing society. Chapter Two includes a literature review that provides direction for a potentially impactful change. This review comprises historical and current educational policies, frameworks for SEL, self-efficacy, and goal setting, as well as related studies that lend perspectives to the direction of the current study. The researcher used this information as a scope for where education has been and the potential promise education provides for the future.

#### History of the Purpose of Schools: From Puritan Values to Soft Skills

Education in America has undergone an evolution from its inception. According to Wright (2019), the beginning of education in America revolved around teaching children to read the Bible and live by Puritan values. Kober et al. (2020) noted, before public schools, many children were excluded from receiving an education altogether, but those who did receive an education were primarily White males. Additionally, families pieced together for children through many different types of schools and arrangements (Kober et al., 2020). This focus on education often resulted in educated wealthier populations (Wright, 2019). When the founding fathers formed the country, they knew that to preserve democracy, educated citizens would make informed decisions about social and political issues and participate in society in a virtuous and moral way (Kober et al., 2020). For this to occur, the founding fathers understood that a unified education system would be required (Kober et al., 2020). This dream continued beyond the founding fathers. As the country formed into states and counties, educational power was given to those entities, while the federal government granted land, which led to more stable communities surrounding schools (Kober et al., 2020). Wright (2019) recalled that in the 19th century, there was a stronger shift to common, government-sponsored education with the advent of the Department of Education. Kober et al. (2020) concurred, stating that the aim for "common schools" (p. 3) for all children would give access free of charge to create "literate, moral, and productive citizens" (p. 3). The government saw education as a great opportunity to connect social classes and improve the lives of families by giving them the needed skills to obtain good jobs (Kober et al., 2020). The government believed that connecting social classes could positively impact the economy, poverty, and nagging social problems, and lead to more happiness and fulfillment, while being a cheaper alternative to punishments and costs related to uneducated citizens (Kober et al., 2020).

Kober et al. (2020) declared that schools forged communities. However, it took longer for students who were not White and male to get access to that education, and custom or law often separated students from underserved populations, while children from immigrant families were expected to Americanize for success (Kober et al., 2020). Then, in the middle of the 20th century, equity for all in education became a focus, with the government playing a role by instituting the Elementary and Secondary Education Act of 1965, the Individuals with Disabilities Education Act, and other laws and acts to ensure equitable educational opportunities for all students (Kober et al., 2020). In addition, as society produced the expectations that students would move from primary education toward college or a career, legislation was created as a response (Loss & McGuinn, 2016). The legislation created not only demanded a high-quality education for all students everywhere in the United States but also instituted external assessment accountability measures as indicators of success, resulting in an era of high stakes and high accountability (Loss & McGuinn, 2016). Further, Loss and McGuinn (2016) noted that the advent of the No Child Left Behind Act (NCLB) increased public visibility of standardized testing. When it appeared that standardized testing systems were successful in yielding greater learning, however misleading this judgment was, more rigorous assessments arrived to measure the academic progress of students, as well as teachers' effectiveness (Loss & McGuinn, 2016). Law creation shifted from ensuring accessibility to schools to increasing the accountability of schools, regardless of inequitable funding, population differences, and structures of governance (Loss & McGuinn, 2016). In 2015, the Every Child Succeeds Act (ESSA) attempted to reduce the federal government's control over education. However, academic achievement, as measured by state assessments, remained (Loss & McGuinn, 2016).

An additional change came as technology advanced in the last 50 years, from the introduction of the calculator to, eventually, the computer (Loss & McGuinn, 2016; Wright, 2019). However, those technological changes have yet to impact education as predicted, leading to disappointment (Loss & McGuinn, 2016). Though technology had increased and changed, and there had been substantial monetary investment to ensure that technology was in schools, the government developed no policies or plans for the social and human factors that significantly impacted learning and life (Loss & McGuinn, 2016). With technology seeming to present endless possibilities (Wright, 2019) and a shift toward ensuring high-quality education for all (Kober et al., 2020), the realization had

come that soft skill needs increased with these technological and societal advances (Wright, 2019). The current world presents a need for people who can change and adapt quickly to overcome challenges that arise and education adapts to meet these needs by implementing SEL (Wright, 2019). Durlak et al. (2011) noted that schools have the unique and essential opportunity to impact students' social-emotional development and academic learning. Life success can depend on early learning of the skills that can help people forge meaningful relationships, make positive decisions, and adjust well to change (Durlak et al., 2011). However, the pressure to improve academic performance, limited time with many requirements, and a lack of resources to address the many facets of education make prioritization of SEL and effective implementation programs for maximum benefit a difficult, but essential task (Durlak et al., 2011). Otgonbaatar (2021) agreed, asserting that people require more skills now than ever, due to demands of the job market from technological advances, environmental issues, and the economic and social climate. Because of this "education systems must prioritize and foster such skills by revising national curricula and teaching strategies" (Otgonbaatar, 2021, p. 238). Schools have begun to recognize that strong social-emotional skills are essential for students to make the most progress in their learning and to be successful in the future.

#### Social-Emotional Learning Theoretical Framework

The need for including SEL skills in schools has been established by both the benefit of these skills to learning and their overall benefit for the future of individuals and society. Espelage et al. (2016) found that students with strong SEL skills developed a greater sense of school belonging through creating positive friendships and increasing academic success and that this resulted in "fewer school-related stressors and greater

access to school-related social resources" (p. 324). When students do not have these skills, interventions through an SEL program to address the skill deficit are important to help develop SEL skills (Espelage et al., 2016).

Brackett et al. (2019) determined that:

Today, SEL refers to the process of integrating cognition, emotion, and behavior into teaching and learning such that adults and children build self- and social awareness skills, learn to manage their own and others' emotions and behavior, make responsible decisions, and build positive relationships. (p. 144)

Brackett et al. (2019) and others (Esen-Aygun & Sahin-Taskin, 2017; Illuminate Education, n.d.; Seal et al., 2015) refer to the five SEL competencies from CASEL to provide a framework for SEL. CASEL (n.d.) defined SEL as the process by which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, as well as feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. The CASEL framework for SEL comprises the "CASEL wheel," which includes five connected areas that help people build the skills they need to manage their lives successfully (CASEL, n.d.). Building self-awareness, self-management, social awareness, relationship skills, and making responsible decisions are part of the framework (CASEL, n.d.). These skills go beyond classroom learning and connect to home lives and communities to provide equitable opportunities for success (CASEL, n.d.). Esen-Aygun and Sahin-Taskin (2017) referred to CASEL's SEL as "knowledge acquirement, understanding and managing emotions, determining positive goals, and spending effort to reach these goals" (p. 1). Seal et al. (2015) added that SEL

includes a broad range of skills, traits, behaviors, and abilities called by many names, including emotional or social-emotional intelligence. SEL is done to acquire stronger social-emotional skills by focusing on self-awareness, consideration of others, connection to others, and influencing orientation in different situations (Seal et al., 2015). Brackett et al. (2019) noted that children could learn these skills by observing others' patterns and can adopt them as their own. Though researchers often cite CASEL's framework, it is not the only foundation for SEL skills noted in the literature. Despite this, it encompasses and connects to many SEL skills that influence academic learning. Therefore, the five skills from CASEL's framework will serve as the core framework for SEL skills for this study.

#### Self-Awareness and Self-Management

Two key social-emotional skills related to success are self-awareness and selfmanagement. Illuminate (n.d.) and CASEL (n.d.) explained that self-awareness includes how a person knows their emotions and their effect on how they act. Seal et al. (2015) extended self-awareness to include "understanding your emotions and talents" (p. 4), which is where self-awareness can connect to academic success. Séllei et al. (2021) confirmed this when pronouncing:

awareness of emotions has a strong effect on academic performance that can be explained by the fact that dealing with educational challenges requires emotional awareness, flexibility, self-motivation, self-control, the ability to handle the emotions of others, and influence the motivations of others. (p. 2)

Through this thought, Séllei et al. (2021) indicated that students require something in addition to self-awareness for academic success. Navigating emotions, thoughts, and behaviors in all situations to achieve success shows self-management

(CASEL, n.d.; Illuminate Education, n.d.). Gugino-Sullivan (2019) noted that selfregulation included the ability to code-switch attention for different situations and accept situations as they are. Illuminate Education (n.d.) supported this with their definition of emotional behavior as the ability to regulate internal states, adapt to change, and respond to stressful or challenging events. Brackett et al. (2019) formulated a process that people go through who can successfully recognize and manage their emotions. People must first be able to recognize emotions in others and themselves (Brackett et al., 2019). Then they understand and analyze the origin of those emotions before specifically detailing them through discrete vocabulary (Brackett et al., 2019). Finally, they express those emotions appropriately for the setting and culture and can regulate those emotions, as necessary, through strategy use (Brackett et al., 2019). Séllei et al. (2021) confirmed with their study that how someone handles stress affects their ability to succeed academically. Notably, someone who functions well with stress, based on certain aspects of their psychology, is more stable and healthier and can handle such situations so that they might even grow from these taxing instances (Séllei et al., 2021).

In their study, Séllei et al. (2021) sought to identify predictors of success for students in their first year of university. By identifying which students would be most successful, researchers could also identify those students likely to need support and create targeted intervention programs to alleviate dropout rates (Séllei et al., 2021). Séllei et al. (2021) used pre-enrollment achievement data and certain psychological factors from questionnaires to determine students' success at the university level and identify students at risk at their time of enrollment in need of support. Using qualitative and quantitative data, researchers found that having and applying coping skills, or self-management skills,
showed the greatest predictive power for success, along with a student's entrance score (Séllei et al., 2021). This success was especially true when coupled with measurements of specific personality traits, such as introversion, extraversion, and stability (Séllei et al., 2021). Though the students' existing skills were important, the goal was also to determine appropriate and meaningful interventions to reduce the likelihood of dropout for those students who did not meet the success criteria (Séllei et al., 2021). Esen-Aygun and Sahin-Taskin (2017) agreed with this approach, determining that SEL programming can help students develop self-awareness and self-management to control their impulses.

Some studies have focused on using mindfulness techniques and yoga to help children develop self-awareness and self-management. For example, Lawlor et al. (2014) searched for a way to measure mindfulness in children, because of its usefulness in redirecting children to essential tasks. In addition, they noted that all people could use mindfulness to improve their wellness, but individuals may vary and change in their proclivity for implementation and effectiveness over time (Lawlor et al., 2014). Gugino-Sullivan (2019) agreed that mindfulness was an approach to support the development of skills to improve self-awareness and self-control and that different ages experience mindfulness differently. Her rationale was that, though children can participate in mindfulness, they might not be able to reflect on their progress with this tool, because of their developmental readiness related to executive functioning development (Gugino-Sullivan, 2019).

Mindfulness requires higher sensory awareness, cognitive control, emotional regulation, and focus (Gugino-Sullivan, 2019). Lawlor et al. (2014) declared that middle childhood is when these skills are particularly important. Children should have

opportunities to practice using executive functioning skills, so they can attend to information (Lawlor et al., 2014). Further, Lawlor et al. (2014) posited that "Middle childhood is a developmental period marked as a time when children develop a sense of competence and personal self-esteem" (p. 731). During this time children become aware of peers in a way that social comparison, meta-cognition, self-awareness, and competition are heightened, practiced, and refined (Lawlor et al., 2014). With all this important change, focusing on mindfulness can help students improve teacher-rated school behaviors compared to peers that have not participated, which suggests an increase in skills to help these students achieve more academically (Lawlor et al., 2014). Gugino-Sullivan (2019) also found that intentionally being mindful often results in greater unintentional mindfulness, with a mindset for mindfulness remaining over time.

Frank et al. (2017) focused these ideas on the mindful control of the body through yoga. People used yoga as a therapeutic intervention to support emotional regulation for exercising self-control, based on the psychophysiological effects and the ability to bring awareness to breathing (Frank et al., 2017). Students participating in yoga programming have noted improved fatigue, less anger, supportive effects for anxiety and negativity, and decreased stress (Frank et al., 2017). When coupled with life skills instruction and interventions, school-related improvements included, "Significant and meaningful improvements in school engagement and concurrent reductions in school engagement and concurrent reductions in unexcused absences and detentions" (Frank et al., 2017, p. 550).

The development of self-awareness and self-management significantly improves students' outcomes. Seal et al. (2015) determined that development in self-awareness and self-management was crucial for both the individual and the collective. The researcher claimed that "personal-interpersonal competence is the increase in emotional knowledge capacity and social behavioral options to achieve desirable, sustainable outcomes" (Seal et al., 2015, p. 4). Frank et al. (2017) agreed, noting that students need to efficiently regulate their emotions and react for positive academic, psychological, and personal outcomes and that school programming, including interventions, needs to support students in helping the progression of appropriate skills.

### **Relationship Skills**

When Seal et al. (2015) discussed the importance of competence in interactions with others for successful outcomes, they specified that consideration of others includes regarding people in the situation before thinking through and acting in a situation. Espelage et al. (2016) noted that connection to peers requires strong communication and social skills. Seal et al. (2015) agreed, defining the connection to others to include the ability to easily develop a "rapport and closeness with others" (p. 4). Illuminate Education (n.d.) and CASEL (n.d.) defined this social awareness as the ability to empathize, understand norms, and understand others' perspectives. Social behaviors are the actions one takes in these situations, and relationship skills are how one manages one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals (CASEL, n.d.; Illuminate Education, n.d.). Part of social behavior and relationships is the ability to influence the orientation of others through leadership to help them move toward change (Seal et al., 2015).

## **Responsible Decision-Making**

Knowing one's emotions, managing them, and applying them in social situations and relationships, are all SEL skills that apply to responsible decision-making. CASEL (n.d.) and Illuminate Education (n.d.) explained responsible decision-making as making compassionate and purposeful social and personal actions. Durlak et al. (2011) furthered this definition by noting that responsible decision-making should occur across various situations to address and prevent detrimental situations. Responsible decision-making results in people contributing to their communities, in turn, feeling valued and a sense of belonging (Durlak et al., 2011). SEL programs have generally been effective in mitigating behaviors or circumstances that would not help individuals succeed, despite the differences or circumstances these individuals may bring to the situation (Durlak et al., 2011).

#### **Impact of COVID-19 on SEL**

Upon completion of the current study, including analysis of the results, the researcher realized the incredible mediating impact of the COVID-19 pandemic on the social-emotional well-being of the students in the study. Therefore, the researcher added this section after the findings to better understand the depth of the pandemic's impact. The Centers for Disease Control (2023) released their Division of Adolescent and School Health Youth Risk Behavior Survey, completed every two years and showing data on several variables collected from high school students during lockdowns and virtual learning. The Centers for Disease Control (2023) referenced Hertz et al. (2022) and Jones et al. (2022) when it stated that "other research and surveys have described the impact of the pandemic on adolescent health and well-being, which was severe" (p. 1), which the Centers for Disease Control validated through their findings. Tortella et al. (2021) named sudden government shutdowns, which drastically altered people's reality, as a cause for impacting well-being and psychological health. Additionally, Grygarová et al. (2022)

conjectured that the drawn-out health emergency had no clear end in sight and younger people were highly affected and unaccustomed to the restrictions and uncertainties of lockdowns. The uncertainties led to greater fear and anxiety related to poverty, mental health problems, and death, as a few examples (Grygarová et al., 2022). Furthermore, in their study, Grygarová et al. (2022) found that anxiety and depression symptoms increased during the COVID-19 lockdown, negatively impacting mental health. The Centers for Disease Control (2023) survey results verified similar findings, with 42% of high school students responding that they were sad enough for two weeks in a row that they stopped participating in their normal activities (p. 60). Tortella et al. (2021) clarified that the adverse mental health effects from the pandemic included "stress, depression, frustration, anxiety, and insomnia" (p. 1). The Centers for Disease Control (2023) added that increases in sadness and hopelessness occurred for all groups of students, as well as plans for suicide. However, Black students were less likely to report their feelings of hopelessness and more likely than peers of other races to have attempted suicide (Centers for Disease Control, 2023, p. 68). In addition, Grygarová et al., 2022) uncovered that lockdowns resulted in greater mental health and depression challenges for females, perhaps because of the dual responsibilities of having to take over teaching and childcare, while also being unaccustomed to restrictions and uncertainties. The Centers for Disease Control uncovered that 56% of female students "experienced persistent feelings of sadness or hopelessness" (p. 60), with 24% creating a suicide plan (p. 65) and 13% of females attempting suicide in the past year (p. 67). Of the female students participating in the survey, 41% reported poor mental health in the last 30 days (Centers for Disease Control, 2023).

With lockdowns came changes to education as an underlying factor that has significantly affected how students learned and, potentially, their learning into the future (Tortella et al., 2021). Tortella et al. (2021) claimed that online learning increased anxiety for many, with increased presentations of slides, a greater teacher-orientation, and stationary instruction as the norm. Students no longer felt safe taking educational risks (Tortella et al., 2021). Moreover, the 10-year trend showed that 20% of female and 11% of male students reported being bullied electronically (p. 49), with increases in male students experiencing online bullying (Centers for Disease Control, 2023, p. 50). Additionally, there were increases in youth who did not go to school because of concerns for their safety (Centers for Disease Control, 2023). Tortella et al. (2021) summarized that the COVID-19 pandemic affected both student learning capacity and psychology. The data from the Centers for Disease Control (2023) "make it clear that young people in the U.S. are collectively experiencing a level of distress that calls on us to act." (p. 4). Helping students feel a sense of school connectedness can result in long-lasting benefits (Centers for Disease Control, 2023). One opportunity for building school connectedness is through the implementation of SEL programming.

## Successful School Implementation of SEL

Brackett et al. (2019) posited that SEL interventions are beneficial. However, the educators who implemented the programming systematically and consistently saw the greatest benefits (CASEL, n.d.; Frank et al., 2017; Payton et al., 2008; Weissberg et al., 2015). Weissberg et al. (2015) noted that the literature contains much information about SEL programming, yet there are ways to improve implementation, despite the knowledge available. Successful implementation must include several intentional pieces and has to

follow a systematic approach to be successful (CASEL, n.d.). Because of these programs' importance and their partnerships with communities, CASEL (n.d.) declared that the SEL policy looks different for different communities. Weissberg et al. (2015) agreed that implementation has been more successful when supported by policy and systems. Having community and family partnerships and appropriate support from district, state, and federal bodies would lead to a greater likelihood of success and outcomes (Weissberg et al., 2015). Further, aiming to synthesize the information from the diverse disciplines, programs, and policies in systems to have coordinated SEL programming will also increase the likelihood of success (Weissberg et al., 2015). Looking further at a systematic approach, Weissberg et al. (2015) questioned how the program length and assessment tools could impact the success and how technology might expand exposure and receptiveness to SEL programs. Frank et al. (2017) declared how important successful engagement and social support are to succeed in transitioning to middle school.

Weissberg et al. (2015) maintained that SEL becomes more important and necessary every day and is more prevalent in its connection to educational and social programming within the United States and worldwide for all age levels and types of students. Payton et al. (2008) posited that schools in the 21st century deliver education to exceptionally diverse students and that not all engage. As time goes by, more students disengage and are likely to take part in behaviors considered at-risk, that negatively impact their success, so early implementation of programming to help promote engagement and growth in positive behaviors is vital to prevent at-risk behaviors (Payton et al., 2008). Taylor et al. (2017) supported the importance of early implementation to promote positive behaviors through their meta-analysis of 82 SEL interventions with follow-up outcomes, finding that those who participated in SEL interventions had significantly better social-emotional skills, outlooks, and other well-being indicators than those in control groups regardless of location, socioeconomic demographics, or race (pp. 1165-1166). Furthermore, Payton et al. (2008) uncovered similar results in their review of 317 studies involving more than 300,000 students looking at universal programming, intervention programming, and after-school programming (p. 16). The research suggested that social, personal, and academic lives improved overall, the interventions were effective for all students, and the effects remained over time.

However, implementation remains the key to success. School staff need collective efficacy to implement the interventions and the programming has to be systematic to be as effective as possible (Payton et al., 2008). The focus should be on social and emotional skills, such as self-awareness, coping skills, conflict resolution, and resisting pressure from peers (Payton et al., 2008). The researchers suggested emphasizing developing attitudes and positive social interactions for successful outcomes (Payton et al., 2008). Taylor et al. (2017) furthered this thinking by declaring that, though educators use different approaches, having a common focus on social skills, positivity, and personal competencies to support relationships, social awareness, and help students grow in their environments are crucial to success.

When looking at specific types of programs, Taylor et al. (2017) observed that positive youth development programs (PYD) improved self-control, social interactions, ability to solve problems, the quality of relationships, academic progress, and commitment to the school. School SEL programs, often connected to the CASEL (n.d.) framework, promoted skills to help students be effective and productive through cognition, behavior, and affective instruction (Taylor et al., 2017). Payton et al. (2008) uncovered improvement in all domains for students in SEL programming. "Compared to control groups, those participating in SEL universal programs demonstrated significantly enhanced social-emotional skills, attitudes, and positive social behavior, reduced conduct problems and emotional distress, and improved academic performance at postintervention" (Payton et al., 2008, p. 12). Similarly, Taylor et al. (2017) found that programming resulted in lasting positive benefits for all demographic subgroups of students that included improved social, emotional, and academic skill sets, but also served as mitigating factors for negative factors. Programming for SEL has economic and societal value, because of the positive, long-lasting effects (Taylor et al., 2017). Payton et al. (2008) discovered that programs implemented by school personnel were more effective than when they came from researchers, likely because students and school staff were familiar and had existing relationships.

## **SEL and Academic Achievement**

Schools that focus on supporting students in their social interactions and relationship building can have students with greater academic gains. Payton et al. (2008) declared:

The positive impact of these programs on academic outcomes, including school grades and standardized achievement test scores, was particularly noteworthy in light of the current educational policy environment in which schools are held accountable for raising student test scores. Although some educators argue against implementing this type of holistic programming because it takes valuable time

away from core academic material, our findings suggest that SEL programming not only does not detract from academic performance but actually increases students' performance on standardized tests and grades. (p. 16)

Kanopka et al. (2020) also proclaimed that there are consistent benefits of helping students improve their SEL skills, some of which include greater academic performance and reducing disparities created by socioeconomic factors. Durlak et al. (2011) posited that schools have the unique and essential opportunity to impact students' socialemotional development and academic learning. Because schools are under pressure to improve academic performance, as well as the limited time and lack of resources provided to address these needs, prioritization and effective implementation of SEL programs to get the maximum academic benefit is essential (Durlak et al., 2011).

Illuminate Education (n.d.) defined *academic behavior* as the necessary competencies for students to get the most out of academic instruction. However, Durlak et al. (2011) pronounced that academic behavior develops through strong SEL programming. This distinction was made because:

SEL programs yielded significant positive effects on targeted social-emotional competencies and attitudes about self, others, and school. They also enhanced students' behavioral adjustment in the form of increased prosocial behaviors and reduced conduct and internalizing problems, and improved academic performance on achievement tests and grades. (Durlak et al., 2011, p. 417)

Teaching SEL skills to students helped them move from having externally reinforced behaviors to having internal reinforcement (Durlak et al., 2011). Gugino-Sullivan (2019) agreed, stating that using self-management skills, such as mindfulness, can improve

academic outcomes and decrease the impact negative thoughts have on academic achievement. A connection was found between the results of mindfulness and academic achievement, as well as the skills that encourage academic success (Gugino-Sullivan, 2019). Durlak et al. (2011) similarly found that students who participated in an SEL program had improved social skills, emotional skills, behavioral skills, general attitudes, and academic outcomes. In fact, students who participated in the specific SEL programming in their study had academic improvements that included an 11-percentile gain (Durlak et al., 2011). Kanopka et al. (2020) found similar results, with students having increased gains in academic achievement, as well as self-reported gains of selfmanagement and growth mindset increases compared to peers who were unable to participate in their study. Esen-Aygun and Sahin-Taskin (2017) sought specific SEL skills supporting academic improvements. The researchers concluded that learning skills of persistence, impulse control, and self-confidence were at the forefront of skills needed to increase academic success (Esen-Aygun & Sahin-Taskin, 2017). Durlak et al. (2011) noted that SEL skill development is vital, because learning is a collaborative process supported by teachers, other students, and families. Increased competency in socialemotional skills leads to increased positive well-being and better outcomes at school (Durlak et al., 2011). Students who struggle with social-emotional skills are more likely to have difficulties in their personal and school lives (Durlak et al., 2011). Lack of competency in these areas often leads students to become more and more distanced from school as they age (Durlak et al., 2011). However, Durlak et al. (2011) cautioned that when educators provide students opportunities for sequenced, active learning and adequate time provided a difference in long term, positive student engagement. Bandura

(1997) developed this idea further with his work on self-efficacy, noting that children developed an accurate understanding of themselves and their abilities when educators provided experiences with explicit instruction in which students were socially supported.

One study strongly connected to Bandura's Social Cognitive Theory by investigating relationships between self-esteem, academic self-efficacy, stress, and academic achievement (Alyami et al., 2017). Alyami et al. (2017) showed that selfefficacy, agency, and belief in capabilities are determinants of academic achievement. The study found small but significant correlations between self-esteem, academic selfefficacy, and academic achievement (Alyami et al., 2017). Self-reported survey scores determined the level of connections (Alyami et al., 2017). Though self-efficacy and selfesteem are connected with academic achievement, students' perceived stress levels did not correlate with academic achievement (Alyami et al., 2017).

Self-efficacy and its impact are the basis of the work of Bandura (1997). He proclaimed, "People's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true. Hence, it is people's belief in their causative capabilities that is the major focus of inquiry" (Bandura, 1997, p. 2). Bandura's (1997) work about what people believe they are capable of is one of the major frameworks this study was based upon.

## A Framework for Self-Efficacy

Bandura (1997) stated that, due to significant societal changes, people had been required to constantly adapt and reinvent themselves. Wright (2019) agreed, positing that people need to have the agency to adapt for the future to overcome challenges. This adaptability and change require social efficacy and self-efficacy, which humans are more than capable of (Bandura, 1997). Ruyle et al. (2019) reiterated this when referencing the Mandela quote, "Education is the most powerful weapon we can use to change the world" (p. 14). According to Bandura (1997), "The growth of knowledge over the course of human history greatly enhanced people's ability to predict events and to exercise control over them" (p. 1). The changing world in which we live requires that people engage in social efficacy for the future; that is how the consequences of behavior are perceived (Bandura, 1997). Ruyle et al. (2019) agreed, noting this is particularly true in education systems, where adjustment for rapid change is needed to account for present and future success. The environments where people exist impact them, but people also shape their environment through goals and planned actions (Bandura, 1997). In addition, people are connected and affected by one another when they exist in a space together (Bandura, 1997).

Because one person's well-being or lack thereof impacts another's well-being, known as *collective agency*, it is of the utmost importance for the well-being of individuals within a society to use their agency for the good of all (Bandura, 1997). This idea is transferable to schools and society, particularly regarding teacher efficacy. Current traditional education practices do not meet the diverse needs of today's students. Ruyle et al. (2019) declared that leaders must commit to school change as a matter of social justice reform so that all students can learn and succeed. Further, leaders must create a culture where all staff believed they can impact student engagement and learning for all students through collaboration (Ruyle et al., 2019). Through their actions, educators can lead the way to improve education if they believe they can.

Bandura (1997) articulated that, in present-day society, almost every action people take is an effort toward gaining control of our lives, including the surrounding environment. Most likely, the effort for control results from uncertainty and being unable to make predictions about one's life can be extremely unsettling (Bandura, 1997). Ratsameemonthon (2013) concurred, stating that, though self-efficacy influences the choices and actions of people, there is a fear of failing to meet the expectations that oneself and others place on them that also shapes the choices and actions people choose. According to Bandura (1997), self-efficacy "refers to the beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Bandura (1997) noted that self-efficacy is important because it can help determine how human capabilities and agency assist them in shaping, organizing, and guiding their lives and the systems in which they exist. A person's capabilities depend significantly on their belief in self to make change for the desired outcome (Bandura, 1997). Ruyle et al. (2019) noted that individuals could be developed and that the "benefit of empowering learners with strong skill sets, modeling positive interactions and solid self-concepts, and cultivating mindfulness along with emotional control is clear and undeniable, and could help avert problems later in life" (p. 11). The current study focused on how self-efficacy supports students in exercising control over their behavior and outcomes, making student achievement more predictable.

## Agency

According to Bandura (1997), "People can exercise influence over what they do" (p. 3). Personal efficacy has the greatest impact on someone's beliefs about their agency and, in turn, their ability to cause change (Bandura, 1997). Ratsameemonthon (2013)

focused on this idea as it related to academics in their study. They found that students' academic achievement and self-efficacy were closely linked (Ratsameemonthon, 2013). Applying Bandura's (1997) ideas to students, if they put effort into regulating what they can control, students are more likely to positively influence their future academic outcomes and stop unsatisfactory outcomes from occurring. Schunk (1996) noted a difference in self-efficacy between previously learned skills, which students have to perform and in actual learning, which most often occurs in school settings, especially elementary school. According to Schunk (1996), students assess their ability to use skills before actually learning skills or knowing the tasks they are to complete. Trying to control aspects of educational outcomes can sometimes produce results that are unforeseen, uncontrollable, unpredictable, and unwanted (Bandura, 1997).

When educators give students positive feedback, their feelings of self-efficacy may increase. However, when students cannot follow through on subsequent tries, higher feelings of self-efficacy subside (Schunk, 1996). Bandura (1997) declared that, despite the potential for self-efficacy to subside, students and educators need to believe that they can influence results. Otherwise, they will take no action toward making something happen (Bandura, 1997). Beliefs around self-efficacy can impact a student's "aspirations, choice of behavioral courses, mobilization and maintenance of effort, and affective reactions" (Bandura, 1997, p. 4). When students feel like agents of change, they feel the freedom that comes with commanding their course of existence (Bandura, 1997). Educators can achieve this by involving students more in their education so that they feel more accountability and ownership over their educational choices (Colby, 2018; Ruyle, 2019).

## Cognitive Processes and Social-Emotional Skill Development

When students can act upon plans and decisions, their brains and bodies are affected in different ways (Bandura, 1997). Having the means to make a change in one's life relies on, and similarly develops, self-regulation of cognitive processes, including reflection, willingly generalizing knowledge and skills, and using other skills related to self-influence (Bandura, 1997). According to Bandura (1997):

After people adopt personal standards, they regulate their behavior by their selfsanctions. They do things that give them self-satisfaction and a sense of pride and self-worth and refrain from behaving in ways that give rise to self-dissatisfaction, self-devaluation, and self-censure. (p. 22)

Colby (2018) noted that students develop these skills within learning and make up a person's character. Students practice self-influence by controlling their thoughts, actions, and effort toward an outcome (Bandura, 1997). Using personal efficacy has students tapping into social skills, motivations, cognitive functions, and manual skills, as well as considering different choices, visualizing potential outcomes and their reactions, and their ability to follow through on potential actions (Bandura, 1997). However, students do not know what they are capable of in certain situations, because they do not know what to expect, have not received feedback or information about how their strategies work within the context of the situation, or they are working under success criteria from a source outside of themselves (Bandura, 1997).

Bandura (1997) noted that self-esteem and self-efficacy are different, because how one views their capabilities is their self-efficacy, while self-esteem links to selfworth. "People need more than high self-esteem to do well in given pursuits. Many

learners who are great achievers are hard on themselves because they adopt standards that are not easily fulfilled" (Bandura, 1997, p. 11). Given the conditions, what people think will happen often depends on how they think they will conduct themselves (Bandura, 1997). Richardson (2017) declared that students often rely on the expectations and judgments of the teacher, so much so that self-direction is suppressed, especially when provided with few expectations. While "most behavior is codetermined by many factors operating interactively, given events produce effect probabilistically, rather than inevitably" (Bandura, 1997, p. 7). Students' behaviors can change based on resulting physical, social, or internal outcomes, as people are malleable (Bandura, 1997). Schunk (1996) listed factors that affect self-efficacy that included self-perception related to ability, how difficult the task is, how much effort the task takes to complete, the level of support that is given or needed, success and failure trends, how the student views their work as similar to the model, and "persuader credibility" (p. 4). Bandura (1997) described things that can hinder, help, or hurt student judgments about their self-efficacy, including psychological or physical needs, like mood or hunger. Additionally, different circumstances may cue past failure or success and the ability to access and use cognitive processes to their potential could create an efficacy perception bias (Bandura, 1997).

## Environment

Outside factors played a significant role in addition to the internal components that influenced self-efficacy. A diverse set of outside influences helped shape the paths that students take (Bandura, 1997). The environment played a significant role, as "the exercise of personal agency over the direction one's life takes varies depending on the nature and modifiability of the environment" (Bandura, 1997, p. 163). Environmental impact was further explained by whether certain situations were imposed, selected, or created (Bandura, 1997). Richardson (2017) cautioned that, although one cannot control outside factors influencing self-efficacy, there is an opportunity to help students develop self-confidence by engaging them in thinking about how they might overcome those factors.

# Development of Self-Efficacy in Children

Although educators know that SEL can help students in many ways, the same educators frequently hesitate to give elementary students agency over their learning. There is much change at the elementary level, with fluctuations in when students develop a sense of self-efficacy, based on their experiences and support (Richardson, 2017). Bandura (1997) explained that very young children are mostly unaware of their capabilities and the potential problems they may face, due to limited experiences and cognitive skills. Therefore, children require adult support to navigate and build an understanding of self. Schunk (1996) posited that if skills and knowledge are lacking, just because a student has high self-efficacy does not mean they will produce a high-level performance. If the student already learned new skills, self-efficacy is the perceived ability to perform actions (Schunk, 1996). Bandura (1997) articulated that children develop personal agency and a sense of self through trial-and-error experiences within the environment. These experiences help in understanding cause-and-effect relationships, including how the child is the change agent to create a desired effect (Bandura, 1997). The actions the child takes that create the desired effect become part of their self, while the outcomes result from those actions (Bandura, 1997). For example, when a child tries something and succeeds or educators support them through reflection, they gain

confidence knowing they have the wherewithal to approach future problems (Richardson, 2017). However, if children are in a setting where circumstances seem to put them in a high likelihood of failure, without support, and no development of reflection after the failure, they can internalize that defeat as a personal shortcoming (Bandura, 1997).

As children age, peers start to play a progressively more important role in individuals' development of self; comparing self to peers assists in that development (Bandura, 1997). Eventually, as they appraise their abilities more, children understand themselves and their capabilities and rely less on immediate feedback (Bandura, 1997). Schunk (1996) concurred, stating that, in viewing peers completing a task, students often have greater beliefs in their capabilities, because they believe they can also achieve the same. Additionally, self-efficacy in children at the intermediate level (grades 3–5) is highly and positively correlated to motivation (Schunk, 1996). Since ability perceptions connect to motivation, they also connect to ego and task orientation; self-efficacy influences motivation and self-regulation during learning (Schunk, 1996). Older children can judge their capabilities with more accuracy, as they can infer based on effort expended and know their limits better (Bandura, 1997). Peer relationships assist in this process as it is through peer comparison and social interaction that reference points are ascertained for cognitive skills and intellectual capabilities (Bandura, 1997). Children's understanding of their abilities is sometimes not pleasing to investigate, but seeing gaps in social or cognitive learning can help them set goals (Bandura, 1997). Bandura (1997) believed this period is crucial and affirmed that:

As adolescents expand the nature and scope of their activities into the larger social community, they have to assume increasing responsibility for conduct that plays a more decisive role than do childhood involvements in fostering or foreclosing various life courses. (p. 177)

Richardson (2017) declared that with assistance in reflecting and developing selfregulation, this developmental period leads to students understanding themselves so that they can further refine their abilities and goals to approach new challenges with a variety of strategies, leading to advancement in academic progress.

### Academics

Schunk (1996) pondered whether self-efficacy could predict academic performance, because of the high agreement between behavior and efficacy. However, Schunk (1996) found that "the fact that self-efficacy does not correspond well to behavior in learning settings than it does in performance contexts highlights a critical difference" (p. 18), leading to common misjudgment of capabilities in learning settings. Bandura (1997) agreed, noting that this developmental learning period is when selfefficacy merges with students' academic learning. Roberts (2013) demanded that educators know their students well enough to find solutions to address educational inequality and lower-achieving students struggling to learn. Further, solutions to educational inequities would be significant for the future economic health of the United States, as all students would have quality educational opportunities to close the achievement gap (Roberts, 2013). Roberts (2013) stated, "One potential area of study within education research which may provide solutions and understanding is self-efficacy as it related to academic achievement" (p. 2). Bandura (1997) declared that the way people act and behave could best be predicted by their expectations for themselves, given

the type of activity and social system. Roberts (2013) agreed, noting that self-efficacy can drive behavior and can affect how learners interact with academic content.

A student's poor performance could have been because they lack ability, but also because they had the ability but their efficacy related to the subject was low (Bandura, 1997). Motivated students who understood their cognitive strengths could learn quickly and adjust to meet current educational practices (Bandura, 1997). Schunk (1996) conjectured that self-efficacy for learning could help students improve their level of competence in areas, as they believe they can develop skills to produce high-level outcomes and participate in activities that are likely to result as such. Frey et al. (2018) agreed, declaring that, "Academic self-efficacy is an important factor in self-regulation" (p. 53). Self-efficacy in tasks leads to self-appraisal, which is predictive (Frey et al., 2018). Thinking about it can help educators differentiate conditions or support for more successful learning outcomes (Bandura, 1997). In addition, educators should have the goal of helping students develop self-regulation and self-direction to promote the positive effects of lifelong learning and success in schooling (Bandura, 1997).

Roberts (2013) posited that developing one's self-efficacy is important to understand and study, as it is likely positively correlated to academic achievement. Selfefficacy around academic content develops through physiological means, social influences, mastery experiences, and vicariously and can grow from evaluation by peers and self, which relates to confidence and an individual's ability to engage in challenges in academic settings (Roberts, 2013). Schunk (1996) added that self-efficacy is based on and affected by students' prior experiences, the support provided, situational factors, and mindset and that students approach learning differently. Teaching students to focus during instruction, study materials, and self-monitor their understanding could all support self-efficacy in learning (Schunk, 1996). Due to this, Roberts (2013) demanded that "teachers and students must develop close working relationships in order for students to achieve academic success" (p. 14). Further, Schunk (1996) posited that seeing students' progress toward goals can positively or negatively impact self-efficacy; perceptions of what progress should entail, including addressing scaffolding difficulty and other academic modifications, could support building self-efficacy in learning. Frey et al. (2018) proclaimed that students' expectations of their learning have an effect size of 1.44, where a 0.4 equals one year of learning (p. 17). Focusing on performance rather than the learning process reduced the full potential of students to understand their level of learning (Frey et al., 2018). Frey et al. (2018) indicated the power student involvement through goal-setting can play in their learning progress.

## **Self-Efficacy and Goal-Setting**

When students understand what they are capable of, they can see their impact. Goal-setting is a guide for how they can use their capabilities to take them toward a desired and planned outcome. Setting goals is beneficial for students' academic progress (Locke & Latham, 2002; Sides & Cuevas, 2020). According to a paper by the Midwest Comprehensive Center (MWCC, 2018), goal-setting has been proven to result in positive benefits for different kinds of people in many different settings with different ages and abilities. Academic goal-setting has shown increased academic performance and greater self-efficacy and interest in school (MWCC, 2018). Further, goal-setting helps develop agency, motivation, and students' abilities to organize their learning (MWCC, 2018). Additionally, "The practice of goal-setting is believed to increase students' goal-setting skills and also increase students' self-efficacy and intrinsic motivation to further their learning" (MWCC, 2018, p. 2). Goal-setting could allow learners to see progress and feel that they can, in fact, make improvements (MWCC, 2018). Locke and Latham (2002) noted that children's goal-setting is affected by observation, judgment, and reaction to self, similar to how Bandura (1997) explained the development of self-efficacy.

# **Goal-Setting in Literature**

Goal-setting has featured prominently in literature in different ways. Sides and Cuevas (2020) noted that goal-setting promotes success because it fosters awareness, increases accountability, and increases motivation to take steps toward attainment. For these reasons, goal-setting studies support further research into the best methods for successful goal-setting implementation. For example, goal-setting in the study completed by Codding et al. (2009) included goals created by the researchers in conjunction with a common instructional intervention. The researchers in that study gauged the effects of goal-setting and intervention on academic progress of third graders measured by math fact fluency (Codding et al., 2009). Based on their findings that math fact fluency can have a powerful influence on confidence and skills in math, the researchers in this study focused on improving fact fluency using the intervention copy-cover-compare with goalsetting and comparing their findings to a control group (Codding et al., 2009). They utilized two different goal-setting models: one focused on reducing incorrect problems and the other on the number of correct problems (Codding et al., 2009). Results indicated that the goal-setting for problems correctly resulted in significantly higher scores than goals for reducing errors (Codding et al., 2009). Though not directly connected to the current study, as researchers in Codding et al. (2009) set the goals for the students, the

results demonstrated that goal-setting could have powerful effects on students (Codding et al., 2009).

Alternatively, Martin (2013) focused on personal best (PB) goals, with suggestions for implementation in schools. Specifically, the report by Martin (2013) emphasized how this approach can help students with attention-deficit/hyperactivity disorder (ADHD). The author described the characteristics typical of someone with ADHD, such as impairments in executive functioning, which restrict self-regulation and lead to lower academic outcomes, and how setting PB goals is an approach to help support students with ADHD to be more successful (Martin, 2013). PB goal-setting, done for a process or outcome, provides specific information to aim for, points attention to tasks, builds confidence, increases effort, and encourages students to reduce gaps in what they know and would like to know (Martin, 2013). Notably, the report contained helpful suggestions for looking at growth measures and encouraging students to focus on their growth (Martin, 2013). Supporting students to focus on their growth is closely tied to the goal-setting in the current study, as students set goals related to their own growth in their behavior (Martin, 2013).

Additionally, Shehzad and Aziz (2019) examined how achievement goals and learning strategies impact achievement. Academic achievement is the attainment of educational goals (Shehzad & Aziz, 2019). Learning occurs when students use these strategies to acquire new information (Shehzad & Aziz, 2019). Moreover, "academic achievement refers to a student's success in meeting short or long-term goals in education" (Shehzad & Aziz, 2019, p. 1) and was also defined in this study as someone's ability in a specific area of academics and was measured by performance on exams, achievement goals set and through a strategies questionnaire (Shehzad & Aziz, 2019). Many factors affect the behaviors that influence academic achievement, including interest, capability, performance, motivation, strategies to take in content, and goal orientation (Shehzad & Aziz, 2019). For this study, learners connected their goals to mastery or performance (Shehzad & Aziz, 2019). Mastery goals correspond with learning, while performance goals connected to comparison with others and competition (Shehzad & Aziz, 2019). Competence also played a role in this study and was defined through three standards: 1) normative competence - performance compares to others; 2) Intra-personal competence - greatest possible achievement; and 3) absolute competence completing the requirements of the task (Shehzad & Aziz, 2019). The study's authors noted that students use different learning strategies to support their academic success (Shehzad & Aziz, 2019). For instance, they may use resource, cognitive, or metacognitive strategies to complete tasks and support their thinking for learning (Shehzad & Aziz, 2019).

Regardless of the strategy used, learning occurs when students use strategies to take in new information, which links directly to academic achievement (Shehzad & Aziz, 2019). The researchers found a relationship between the goals set and academic achievement, with learning strategies used as mediators (Shehzad & Aziz, 2019). In addition, goals based on mastery and performance approach positively correlated with academic progress, while there was a negative association with performance avoidance goals (Shehzad & Aziz, 2019). The current state of education, with the focus placed on performing better than peers, necessitates students to adopt avoidance goals, which do not support academic achievement (Shehzad & Aziz, 2019). Frey et al. (2018) agreed that learning could not be limited to comparing performance to peers. Rather, learning is complicated, as skill and knowledge acquisition can come from experience or instruction, and the demonstration of knowledge and learning is by different factors (Frey et al., 2018). One of these factors is the belief in one's capabilities.

### A Framework for Goal-Setting

Self-efficacy and its connection to goal-setting is not a new concept. In their review of 35 years of major research on goal-setting theory, Locke and Latham (2002) noted that self-efficacy is important for goal-setting and attainment. Not only are selfefficacy and belief in one's capabilities paramount in setting and attaining goals, but intentions are also important to consider for successful goal attainment. In his book, Intentional Behavior, Ryan (1970) declared that intention connects to the initiation, or onset, of behavior, which connects to motivation. Much more is involved in a person's choice than what people observe on the surface in their actions (Ryan, 1970). Frey et al. (2018) concurred, declaring that belief in self feeds into the willingness to take academic risks, and fluctuates from subject to subject. Additionally, learners have to have opportunities to think about their thinking and feelings, consider their status related to learning, and act accordingly for progress (Frey et al., 2018). Though the definition of learning as "the acquisition of knowledge and skills through experience study, or by being taught" (p. 11) may suggest goal-setting is simple, measuring learning indicates that the process is, in fact, complicated (Frey et al., 2018). Learning and goal-setting are complicated and can encompass so many aspects, from memorization to application of skills to summative assessment performance (Frey et al., 2018). In his research, Ryan (1970) sought to answer the questions about what can and cannot be controlled

intentionally and, to arrive at different results than unintentional actions, what are intentional actions that a person can take? Believing that intention is the basis of behavior, he posited, "We can speak of intention as causing a particular kind of behavior if we find that a given intention makes that kind of behavior more likely" (Ryan, 1970, p. 11). Further, Ryan (1970) believed that people can determine intentions by working out explanations to test those intentions and using the results to make predictions about goals or actions (Ryan, 1970). In their book, Frey et al. (2018) focused on goal-setting related to learning. The authors made the distinction between goal-setting and task completion, in that goal-setting is not the same as completing assigned tasks, but should focus on learning of concepts (Frey et al., 2018). Ryan (1970) highlighted broader outcomes, noting that intention is choosing one thing over something else to attain an ideal outcome. Ryan (1970) supported this by stating, "A specific intention involves not only the choice of one activity over another, but also involves a goal to act a particular level of intensity" (p. 117). Intention can be separated from the behavioral impact of time, as people may have an idea of what they want to accomplish, achieve, or do, but the fulfillment comes later (Ryan, 1970). In addition, people can manipulate intentions by setting up situations or giving instructions, as through goal-setting (Ryan, 1970). Locke and Latham (2002) stressed that there are practical applications of goals, including improving productivity, performance, and improved self-regulation. However, the level at which someone performs is closely tied to their goals, so Ryan (1970) found that looking at the intention, task, purpose, or goal at the beginning of activity to understand how they may perform was important.

There were several core findings in Locke and Latham's (2002) review to guide goal-setting for optimal outcomes. There is a connection between the difficulty of the goal and the performance of the person setting the goal, indicating that people perform at a higher level if they set higher-level goals (Locke & Latham, 2002). The review also revealed that setting specific, high-level goals resulted in better outcomes than telling people to use their best effort (Locke & Latham, 2002). Finally, setting goals that challenge just the right amount (not easy, but not overwhelming) led to greater levels of achievement (Locke & Latham, 2002).

Several factors affect goal performance or cause the moderation of goals (Locke & Latham, 2002). Rowe et al. (2017) acknowledged timelines and action steps with specific, measurable outcomes support goal attainment. Similarly, according to Ryan (1970), intention connects to a clear series of thinking, but outside factors influence intention. People focus on what they want, because they hope to attain something based on the situation in which they find themselves (Ryan, 1970). Frey et al. (2018) furthered this thinking by adding that, in setting goals, students not only know where they are going in terms of their current performance, but also what they are supposed to learn and what success looks like. Peoples' experiences affect intentions and goals, which are critical in understanding intentions (Ryan, 1970). Ryan (1970) observed that "the experiences are there, and we can ask what role they play in controlling our behavior, without concerning ourselves with what experiences are made of" (p. 91). How the individual sees the situation, or is cognitively understood, affects their intention (Ryan, 1970). Frey et al. (2018) included this in their book, observing that, even at age eight, students have the capacity to know what they want to achieve and set goals. Ryan (1970)

posited that an individual's current and possible situations related to the goal, how the individual perceives themselves outside and within the context of the situation, their opportunity or proximity of the goal based on contingencies, their general goals and plans, and where they fit into pertinent structures, also have an impact on goals and intention. Intentions influence behavior, but some intentions originate from personal expectations, preferences, and perceptions (Ryan, 1970). In addition, internal stimuli, external stimuli, background, and physiology can influence behavior, which, in turn, can influence intentions and goals (Ryan, 1970). Despite outside stimulus, "Without knowing fully how intention produces effects on behavior, and recognizing only that it obviously does have effects, we can still ask what is responsible for the decision to carry out a particular activity" (Ryan, 1970, p. 353). Though individuals may verbalize through reasons, justifications, explanations, or rationalizations to make what happens or happened more understandable, in truth, these may or may not affect behavior (Ryan, 1970). Because of this, Frey et al. (2018) emphasized teaching and helping students use strategies that support learning, such as management, motivation, meta-cognition, and cognitive strategies.

For Ryan (1970), observable behavior revealed and determined the usefulness of purpose, consciousness, and intention. Ryan's (1970) study focused on looking deeper at relationships and predictive outcomes through cause and effect. Individuals perceived and understood what was happening in the environment and responded to the perceived situation (Ryan, 1970). The study focused on something greater than stimulus and response in a physiological sense, but rather, tried to explain the initiation, persistence and level of psychological activities related to intentional behavior (Ryan, 1970). Despite this, Ryan (1970) conceded that physiological factors influence intention and goals (Ryan, 1970). Frey et al. (2018) hoped to support overcoming these difficulties by teaching students strategies to use to get themselves to their goal, including monitoring their progress, seeking feedback and self-assessing, knowing when they are ready for the next step, and knowing what the next steps are that that need to be carried out.

Locke and Latham (2002) noted the difficulties in goal-setting and intention. For instance, goal-setting and intentional behavior on the part of the individual can be in conflict with an organization's or society's goals (Locke & Latham, 2002). Whether an individual sets goals for learning or performance can also pose strain, as a predisposition to one or the other may not serve the appropriate purpose in different circumstances (Locke & Latham, 2002). Similarly, goal-setting and intention related to factors connected to personality or motivation can create conflicts (Locke & Latham, 2002). For these reasons and because of the experiences that individuals have, researchers have found it difficult to study intention, plans, or purposes (Ryan, 1970). Moreover, behavior can be the outcome, with external and physiological stimuli as contributing factors, or behavior may be the outcome or occur automatically despite intention (Ryan, 1970).

Regardless of outside factors influencing intention, people can still aim for particular outcomes. Frey et al. (2018) declared that self-questioning leads to insight and reflection, which leads to progress (Frey et al., 2018). Ryan (1970) believed there was a relationship between cognitive structure and how intentions form, but that this process can only be understood by establishing the organizing principles and simplifying the relationship between cognition and intention (Ryan, 1970). Ryan (1970) stated this as: Not only do we wish to explain the individual's intentions by finding out how he perceives the situation, what he anticipates as the results of different ways of behaving, and the character of activity as he anticipates it, but we often want to go further. At the third level of explanation, we ask why the individual perceives the situation as he does, why he finds a particular activity interesting, etc. (Ryan, 1970, p. 27)

Individuals think in different and complex ways, so educators should personalize instruction and learning by involving the learners in the process (Colby, 2018; Frey et al., 2018; Ruyle et al., 2019).

## A Shift to Personalization in Education

Several types of goal-setting exist in current literature. However, behavior goals that influence learning relevant to individuals were virtually non-existent. In their book, Loss and McGuinn (2016) cited a quote from a teacher's association indicating that the involvement of students in their learning was of the utmost importance: "Every child should have a wholly unique individualized education plan which is consensually created by an administrator, a teacher, the parent(s), and - most importantly - the student" (p. 70). Loss and McGuinn (2016) indicated that relevancy to the student's experience is paramount. Involving children in their learning through goal-setting is one of the aims of the current study. There are current movements in education toward giving students more agency over their learning process (Colby, 2018; Frey et al., 2018; Ruyle et al., 2019).

## Personalized Learning

Education has looked the same for decades, despite the goal of helping students prepare for future success in a changing world (Colby, 2018). Ruyle et al. (2019)

declared, "Schools are the most important organizations in the world. Our continued survival and advancement as a species depends on strong educational systems" (p. 28). Despite this idea, the current educational system has lost many children with a required pace with which to learn on an expected learning path of acquiring skills and knowledge before moving to the next level (Bandura, 1997; Colby, 2018). This model of education requires students to assimilate and those that do not struggle and require intervention (Colby, 2018). Education is still trying to figure out how to move into the 21st century, while most students in schools at this point were born in this century and are ahead of the system before they enter school for the first time (Colby, 2018). Education is not providing the preparation needed and educators see the need to change to a more individualized model of instruction and learning (Colby, 2018). Leaders must support and facilitate an environment where everyone is moving toward a common vision, with collective efficacy and authentic optimism (Ruyle et al., 2019). Meanwhile, attempts at trying to improve education have failed:

As federal and state accountability measures ramped up in the early 2000s, the subject area or discipline silos became a breeding ground for coverage of content that bull-dozed over much of what we know from research about how students learn. (Colby, 2018, p. 3)

One possible solution is to make learning more individualized through competency-based education (CBE), where the model fits individual students as educators help students engage with the curriculum through learning activities that are flexible to allow for progress at their own pace toward proficiency (Colby, 2018). Other key features of this model include students being able to advance upon mastery of content, using

competencies that are specific, measurable, and empower students, and having assessment as a part of the learning (Colby, 2018). Support for students in CBE is differentiated upon need, with outcomes focused on application and creation, and throughout the development of soft skills and assets are emphasized (Colby, 2018). When implemented with fidelity, CBE increases students' academic capacity, engagement, learning, and achievement (Ruyle et al., 2019).

Learning to use and develop "personal success skills" (Colby, 2018, p. 9) that are not academic in nature is a key characteristic of CBE work to help students be successful. These are often skills that make up the character of individuals, and skills that educators should focus on to help students nurture and grow as assets (CASEL, n.d.; Colby, 2018). In a traditional schooling system, when learning becomes difficult students are expected to find ways to continue working through the difficulties, though perseverance is rarely explicitly nurtured (Colby, 2018). However, in a competency-based learning model, personal success skill instruction is within the learning, and teachers facilitate experiences and thoughtful planning of rich, meaningful, and rigorous tasks, so they can help students make connections, engage in critical thinking, and practice using perseverance with support (Colby, 2018). These activities call on students to tap into their knowledge of self, the ability to communicate, collaborate, and be creative (Colby, 2018; CASEL, n.d.). In addition, assessment practices in CBE have the potential to involve a SEL dimension that can empower students, rather than current practices where highstakes testing is often employed (Colby, 2018). However, support for implementation requires coaching on a new model and toward being learner-centered to help students understand the direction of their learning to set and reach their goals (Ruyle et al., 2019).

# **Connecting Self-Efficacy and Goal-Setting to SEL**

Though learners set goals and plan actions to reach those goals based on their experienced current circumstances, motivators relate to potential future states, and one's belief about reaching that potential future state (Bandura, 1997). Then, people act on their plans to reach that potential future state (Bandura, 1997). So, actions and self-regulation are guided and motivated by forethought to reach goals and avoid negative outcomes (Bandura, 1997). Different aspects of motivation connect goal-setting and socialemotional factors that influence success (Bandura, 1997). For instance, personal capability, effort, ability to engage with difficult tasks, persistence in difficulty and after failure, and anticipation of expected outcomes based on their behavior, all influence the formation and adjustment of goals (Bandura, 1997). Additionally, how goals are set can determine the level to which they motivate and engage, including specificity, the amount of effort required, the time it takes to reach the goal, personal relevance, and likelihood to lead to accomplishment (Bandura, 1997).

#### Successful Implementation

There are supports that educators can give to promote the successful implementation of goal-setting practices. Bandura (1997) conjectured that without support to help learners set goals, a lack of student knowledge and no direction for what to do to achieve their goals can result in socially alienating behavior, leading to the opposite of the desired effect (Bandura, 1997). Therefore, the MWCC (2018) declared that success (in the form of desired outcomes) depends on goal-setting strategy design and implementation. Goal-setting has to include support through group advisory and individual conferencing and be part of an individual learning plan (Bandura, 1997;

Brackett et al., 2019; MWCC, 2018; Sides & Cuevas, 2020). Setting goals has to be systematic, so that learners' abilities to set just-right goals increases and academic performance can improve over time (MWCC, 2018). Goals should be attainable in a timely manner, should be specific, and should include action steps that the learner can carry out on their own (MWCC, 2018). Through the process, learners must have the opportunity for self-reflection (MWCC, 2018). Sides and Cuevas (2020) agreed, noting goals should be mastery-focused and realistic with measurable outcomes, while action steps require timelines to encourage engagement and skill growth. If these aspects are not included, implementation is less likely to be successful. Further, Brackett et al. (2019) claimed that other reasons for lack of success may be the goal-setting approach itself, lack of relevance, or lack an obvious coordinated effort with all stakeholders. Beyond these reasons, roadblocks to strong implementation include finances, time for appropriate integration and planning, and lack of good training (Brackett et al., 2019). Strong implementation is key to a goal-setting process that leads to desired outcomes. However, there are other factors that mediate goal-setting and achievement.

#### **Connecting Self-Efficacy and Goal-Setting to Academic Achievement**

Asakereh and Yousofi (2018) noted that affective factors, like reflective thinking, self-efficacy, and self-esteem, play a significant role in the academic success of students for whom English is a foreign language. Frank et al. (2017) found that instructing over similar skills supported those at a disadvantage because of experiences or socio-economic impact. Sides and Cuevas (2020) declared that goal-setting in and of itself affects academic performance, because it impacts social-emotional factors. Ratsameemonthon (2013) posited that learners have a fear of failing because of built in systems of meeting

other people's expectations and that finding ways to help students complete academic tasks and retain information is highly coveted, especially for populations considered at risk. However, setting goals and building responsibility skills requires instruction and learners may have a difficult time connecting their goals to their cognitive and affective qualities (such as motivation and self-efficacy), may lack awareness, or these qualities may be connected to their development (Sides & Cuevas, 2020).

Further, Ratsameemonthon (2013) declared that "Self-efficacy influences individuals' choices and the courses of action they pursue" (p. 15), indicating that individuals' feelings about their own capabilities can also impact their goal-setting, and, potentially, their achievement. Ratsameemonthon (2013) studied the relationship between achievement, goals, and self-efficacy by three different models. In one model, learners set achievement goals with a mediator of learner self-efficacy where achievement was dependent upon the goals (Ratsameemonthon, 2013). In the second model, self-efficacy was the independent variable, the goals were the mediators and achievement was the dependent variable, while the third model had the independent variables as self-efficacy and academic goals with achievement as the dependent variable (Ratsameemonthon, 2013). The results indicated that academic achievement and academic self-efficacy are closely linked, and that goal-setting assists learners in identifying what's important and how to improve in that area in an efficient and effective way, rather than focusing solely on outcome (Ratsameemonthon, 2013). Moreover, performance-approach goals connected more to achievement than other types of goals (Ratsameemonthon, 2013).

In their study, Sides and Cuevas (2020) observed a positive relationship between setting high goals and academic performance. Furthermore, they referenced Schunk
(1985), who declared that the biggest difference results from self-set goals and the ownership involved therein (Sides & Cuevas, 2020). Sides and Cuevas (2020) also referenced the goal-setting work of Locke and Latham (2006), who found that goal-setting increases performance and possible attainment if the appropriate level of commitment exists, which makes it a possible predictor of academic benefit. MWCC (2018) connected goal-setting and self-efficacy to better grades by referencing Schunk (1989) and Rice (1991), whose studies showed improved academic outcomes, as well as Morisano (2010), whose four-month goal-setting study resulted in lower anxiety and better grades. Ratsameemonthon (2013) cautioned that, to get the full benefit, there is a need for effective intervention programs to support the learning process, which encourages full understanding of the importance of academic achievement and self-monitoring skills.

#### Assessments

To determine the effectiveness of programming, there are numerous assessments that measure SEL skills. Some of these include the Social Emotional Development (SED) model and instrument, the revised Social Emotional Development (SED-1) model and instrument, and Personal-Interpersonal Competence Assessment (PICA; Seal et al., 2015), which determine soft skill capabilities. Others include the Caring of Others (COO) scale, (Espelage et al., 2016) and the Empathic Concern (EC) scale (Espelage et al., 2016), both of which measure relationships with others. Esen-Aygun and Sahin-Taskin (2017) developed a Scale of Social-Emotional Learning Skills, which included questions about relationships among friends, friendship perception, persistence, success, selfmanagement, self-confidence, and impulse control. Though several scales exist to measure SEL skills, for the purpose of this study, one part of the Social, Academic, Emotional Behavior Risk Screener (SAEBRS), the mySAEBRS (Illuminate Education, n.d.) self-assessment, was administered.

mySAEBRS, created by Illuminate Education (n.d.), was utilized for how students rate their skill level in each of the five competencies described by the CASEL (n.d.) framework. These include Self-Awareness, Self-Management, Responsible Decision-Making, Relationship Skills, and Social Awareness (CASEL, n.d.). Though in the SAEBRS, teachers evaluated student success in each of these areas, in the mySAEBRS, students rated their strengths and areas of risk for social-emotional competencies (Illuminate Education, n.d.). This self-rating is divided into three domains of behavior: social, emotional, and academic (Illuminate Education, n.d.). The results show how students rated themselves in several areas for each of those three domains of behavior (Illuminate Education, n.d.). According to Illuminate Education (n.d.), the areas students rated themselves for Social Behavior include arguing, cooperation, temper, disruption, social acceptability, and impulsivity. For Academic Behavior, students rated themselves on academic interest, readiness, academic performance, independence, attention. and engagement (Illuminate Education, n.d.). For Emotional Behavior, the students rated themselves on sadness, anxiousness, adaptability, positivity, worry, resilience, and withdrawal (Illuminate Education, n.d.). Results showed students their specific strengths in these areas and gave opportunities to set goals for improvement (Illuminate Education, n.d.). Though the mySAEBRS (Illuminate Education, n.d.) assessment tool has been studied for validity and reliability (Kilgus et al., 2021), as well as for use as a relevant

progress monitoring tool (Moulton et al., 2019), more research is needed for how the use of this tool can have a meaningful effect on behavior and academic change.

### The Need for Further Study

The connection between goal-setting for improved learner behaviors and academic achievement has not been readily studied. Kanopka et al. (2020) noted that research looking at how changes in SEL connect to changes in outcomes in academics and behavior is rare. Sides and Cuevas (2020) confirmed this claim, stating that there is a lack of research for goal-setting at the elementary level, and, in fact, previous research for goal-setting has been limited. One reason for the lack of connected research in socialemotional skills is the inclusion of self-ratings or questionnaires which can result in biased responses from social pressure, such as responding the way they think people or society would want them to respond (Otgonbaatar, 2021). However, because socialemotional skills play a part in learning, obtaining an individual's feelings in this area is crucial to insight. More research in this area could determine the impact of socialemotional skill self-efficacy and proficiency on learning.

#### Summary

There have been changes in education in the United States since the birth of the country. The educational changes have resulted in a need for an additional change, namely connecting SEL and efficacy through goal-setting and academic achievement. The current study aimed to bring these factors together. In Chapter Three focused on the research method and design of the study. The researcher looked at the impact of greater student accountability, ownership, and agency in the form of goal-setting on academic achievement.

#### **Chapter Three: Research Method and Design**

The evolution of education, societally and legislatively, led to the current predicament, with a demand for higher levels of learning, increased accountability for schools, and increased technology use (Kober et al., 2020; Loss & McGuinn, 2016; Wright, 2019). Educators called for the need for change to match these demands since the end of the last century (Loss & McGuinn, 2016). Societally, students required more skills related to interaction, self-monitoring, and problem solving, so that they could adapt and change for the roles they would need to fill in their future (Kober et al., 2020; Loss & McGuinn, 2016; Wright, 2019). Legislatively and logistically, the 21st Century is here, but an education system exists that does not meet the learning needs of the children or global society it should serve (Ruyle et al., 2019). The current system of education has not adequately met any of these demands (Ruyle et al., 2019). Global technology has enhanced our capabilities, but policies have not supported the population with the required corresponding social and emotional support skills (Loss & McGuinn, 2016). Educators, continually looked for ways to help students learn, but recognized that learning at the expected levels cannot occur without incorporating SEL into everyday instruction (Colby, 2018; Kober et al., 2020; Loss & McGuinn, 2016; Ruyle et al., 2019; Wright, 2019).

Competency-based and personalized programs could support more individualized academic and behavioral learning to engage students to know who they are as learners and to learn at their own pace with supports that specifically improve their confidence, self-efficacy, agency, and accountability (Colby, 2018; Ruyle et al., 2019). This study focused on aspects from literature related to competency-based, personalized learning

(Colby, 2018; Ruyle et al., 2019), Bandura's (1997) and Schunk's (1996) works related to self-efficacy, the work of Ryan (1970) on intentionality, and the work of Frey et al. (2019) on creating independent and capable learners. Researchers of several studies recognized the positive impact that goal-setting for improved academics could have on academic achievement (Codding et al., 2009; Dotson, 2016; Locke & Latham, 2002; Martin, 2013; Muhammad & Aziz, 2019; MWCC, 2018; Omer Shehzad & Aziz, 2019; Ratsameemonthon, 2013; Sides & Cuevas, 2020) and how social-emotional skills, learning, and programming are connected to academic achievement (Alyami et al., 2017; Asakereh & Yousofi, 2018; Boland, 2015; Brackett et al., 2019; Durlak et al., 2011; Esen-Aygun, & Sahin-Taskin, 2017; Espelage et al., 2016; Frank et al., 2017; Kanopka et al., 2020; Otgonbaatar, 2021; Payton et al., 2008; Seal et al., 2015; Séllei et al., 2021; Sides & Cuevas, 2020; Taylor et al., 2017). In addition, researchers in several studies examined tools that measure the aforementioned social-emotional concepts (Brackett et al., 2019; Esen-Aygun & Sahin-Taskin, 2017; Kilgus et al., 2021; Lawlor et al., 2014; Moulton et al., 2019; Seal et al., 2015), but were not coupled with goal-setting. When goal-setting was included in studies, adults usually set goals for students or the students who set goals were of adult age. However, an exploration for research connecting goalsetting for improved social-emotional skills and behaviors to academic achievement yielded a fairly empty gap in the literature. Sides and Cuevas (2020) conducted research making such connections and observed the gap in the research, particularly as it related to elementary-level students. However, their study also had students setting academic achievement goals (Sides & Cuevas, 2020). For the purposes of this study, it was important that students understood the ownership of setting their own goals for improved

behavior and, in turn, how that development of student agency impacted their academic achievement.

### Purpose

The purpose of the study was to determine if targeted goal-setting for improved behavior resulted in greater academic achievement. The added benefits of the study included improving awareness and increasing ownership of behavior, as student goalsetting required self-awareness and allowed for creation of plans to address the goals. Additionally, the researcher utilized specific frameworks related to competency-based and personalized learning concepts to determine students' academic achievement growth when given more control over their behavior. Using Bandura's (1997) work as a framework for understanding self-efficacy, with support from Frey et al. (2018), the current study aimed to build students' beliefs about their capabilities to change their behaviors related to learning. In turn, Ryan's (1970) work, along with the work of Frey et al. (2018), served as the framework for student goal-setting processes. The researcher gave students the agency to be intentional about what they wanted to improve, based on the outcomes they wanted to see and guided students through a goal-setting process to help them achieve those outcomes. The frameworks related to student agency, selfefficacy, intentionality, and individualization in the form of competency-based learning and student-directed learning led to the idea for the study.

Students received behavioral self-assessment results for three different areas: Academic Behavior, Social Behavior, and Emotional Behavior. Each behavior area included further defined areas noting whether students considered the behavior a personal strength or opportunity. Next, students used the self-assessment results to set improvement goals. A video defined terms and supported students in reading their selfassessment results allowing goal-setting using a *Qualtrics* survey based on the Fisher et al. (2019) goal-setting model. *Qualtrics* is an online data collection program used for student goal setting and check-ins during the study.

At the onset of the study, the researcher collected baseline academic achievement data from three benchmarking websites utilized by the school to ascertain academic scores pre-study. With weekly goal check-ins as reminders, students had the opportunity to adjust their thinking to meet or change their goals, as desired. Post-data were collected eight weeks from the study-prescribed goal-setting process to see if students who set the goals had statistically significant increases in their academic growth. The researcher analyzed and compared data for the different areas in which students set goals in several ways.

The first analysis was on the academic achievement of students who set goals for improved Social Behavior. Students chose a specific area to improve, based on their selfassessment of social learner behaviors, by setting goals that focused on arguing, cooperating, temper control, disruptions, social acceptability, or impulsivity. The researcher compared the means of pre- and post-academic scores for the group to determine if there was statistically significant score improvement. The study results had potential for student improvement in Social Behavior and increased academic achievement (Esen-Aygun & Sahin-Taskin, 2017; Espelage et al., 2016; Durlak et al., 2011; Gugino-Sullivan, 2019; Kanopka et al., 2020; Payton et al., 2008).

The next area the researcher analyzed was academic achievement for students who set goals set goals to improve Academic Behavior. Based on students' selfassessment of learner behaviors, these students chose a specific academic behavior to improve by setting goals pertaining to academic interest, readiness, academic performance, independence, attention, or engagement. The researcher compared the means of pre- and post-academic scores for the group to determine if there was statistically significant score improvement. The study results had potential for student improvement in Academic Behavior and increased academic achievement (Esen-Aygun & Sahin-Taskin, 2017; Espelage et al., 2016; Durlak et al., 2011; Gugino-Sullivan, 2019; Kanopka et al., 2020; Payton et al., 2008).

The third area analyzed for statistical significance was the academic achievement growth made by students who set goals for Emotional Behavior. Based on their selfassessment of learner behaviors, these students chose a specific area of Emotional Behavior in which to set goals for improvement: sadness, anxiety, adaptability, positivity, worry, resilience, and withdrawal to improve. The researcher compared the means of preand post-academic scores for the group to determine if there was statistically significant score improvement. The study results had potential for student improvement in Emotional Behavior and increased academic achievement (Esen-Aygun & Sahin-Taskin, 2017; Espelage et al., 2016; Durlak et al., 2011; Gugino-Sullivan, 2019; Kanopka et al., 2020; Payton et al., 2008). Since educators look for ways to increase academic achievement, and the mySAEBRS (Illuminate Education, n.d.) assessment broke down learner behaviors into these three categories, the research could reveal a particular area where goal-setting for improvement proved to be a greater leverage point.

Finally, the researcher compared the academic achievement growth of students who set goals for improving their learner behaviors using the prescribed goal-setting process to their peers, who used their class's normal goal-setting procedures. An expectation of the study was that the prescribed process would identify key information for students to use as a focus when identifying their goals, as well as provide consistency in thinking about improvement (Frey et al., 2018; Martin, 2013; Shehzad & Aziz, 2019; Sides & Cuevas, 2020). The control group of peers did not take part in the prescribed process, but rather followed the goal-setting process their teacher normally used. The difference in goal-setting processes may lead to a difference in academic achievement results, with the expected outcome that those who had a more specific focus would have greater academic success.

#### **Questions and Null Hypotheses**

This study made use of student self-assessment scores and goal-setting surveys as secondary data pieces. In addition, the researcher utilized secondary achievement benchmarking data from Evaluate (Catapult Learning, n.d.), FastBridge screening (FastBridge, n.d.), and The IXL Diagnostic (IXL Learning, n.d.) to address the following questions:

**Research Question 1**: How does student goal-setting for improved social behavior increase academic achievement?

**Research Question 2**: How does student goal-setting for improved academic behavior affect academic achievement?

**Research Question 3**: How does student goal-setting for improved emotional behavior increase academic achievement?

**Research Question 4**: How does student goal-setting for improved behavior affect academic achievement?

Null Hypothesis 1: Student goal-setting for improved social behavior does not increase academic achievement.

**Null Hypothesis 2**: Student goal-setting for improved academic behavior does not increase academic achievement.

**Null Hypothesis 3**: Student goal-setting for improved emotional behavior does not increase academic achievement.

**Null Hypothesis 4**: Student goal-setting on learner behaviors does not increase academic achievement.

#### Method

This study is an example of a mixed methods study, using qualitative and quantitative methodologies. According to Fraenkel et al. (2023), the advantage of doing a study with multiple methods is analysis can occur with more and varied types of data. The researcher received approval to use secondary data requested from the site's school district central office. The approval is not included in an appendix to maintain the anonymity of the district. Students assessed themselves through an online benchmarking assessment called mySAEBRS on the FastBridge platform (Illuminate Education, n.d.). The results helped the students set goals. The researcher collected student goal-setting information as qualitative data. Academic achievement data were collected as secondary quantitative data from three password-protected, online benchmarking websites: The IXL Diagnostic (IXL Learning, n.d.), Evaluate (Catapult Learning, n.d.), and FastBridge screening (FastBridge, n.d.). As approved during the Institutional Review Board process and to maintain student anonymity, the researcher coded data by matching the student names to a number and letter combination in a separate, password-protected spreadsheet,

collecting and matching the data to their coded information, and then removing any names to maintain anonymity.

The methodology for this study included a combination of student self-assessment of learner behaviors, a goal-setting survey based on the results of the self-assessment, weekly check-in surveys for students to make goal adjustments, and collection of academic achievement data at the beginning and end of the study from the aforementioned websites. The purpose of the student self-assessment was for students to think about and rate their behaviors as learners. The assessment, shown in Figure 1, consisted of 20 questions that students rated themselves on a Likert-like scale from Never to Almost Always. This tool was utilized as part of the FastBridge benchmarking platform, that is highly researched for its validity and reliability in identifying specific areas in which students require support across academic and SEL.

# Figure 1



mySAEBRS (Social-Emotional Self-Rating) Student Questions

continued



Note. (Illuminate Education, n.d.)

The goal-setting survey (see Figure 2) was implemented so that students could reflect on their self-assessment results and set goals to make a change in their chosen behavior, thus giving them agency and accountability for change. During this part of the study, students determined the area of their behavior they wanted to improve. This was a key part of the study to address the research questions. The goal-setting survey was supported by a researcher-created video (see Figure 3 for script), which aimed to help the students understand the results of their pre-assessment and the vocabulary so that students

would understand the information given to them. The researcher collected goal-setting

data to address the research questions.

# Figure 2

Goal-Setting	Form/Oualtrics	Survey Based U	non Fisher et a	l. (2019)
Obui Dunng		Survey Duseu O		

$\varepsilon$ $\varepsilon$ $\tau$ $\tau$
Which area are you setting a behavior goal for: Social Behavior, Emotional Behavior, or Academic Behavior?
Social Behavior
Emotional Behavior
Academic Behavior
What is your goal?
Why did you choose this area and this goal?
What will you do to meet your behavior goal? .ist the steps you will take.
low will you know if you have made progress toward meeting your learning goal?
oal Writing Checklist
Check your goals and click when complete.
My goal is something I need to improve.
I wrote why it is an important goal for me.
I have a plan to meet my goal.
I have a way to see if I am making progress toward O

#### Initial Goal-setting Video Transcript

You are looking at your results from your mySAEBRS pre-assessment. We are going to give you information about these results so that you can set goals to improve your behavior based on how you rated yourself.

When you look at your report, it is broken into three different areas: Social Behavior, Academic Behavior, and Emotional Behavior.

Social Behavior is the first area. This area of behavior includes how you rated yourself on how you understand the way things happen in social situations, and how you can understand others' feelings and perspectives. The words across the bottom are arguing, cooperation, temper, disrupt, social acceptability, and impulsive.

Arguing means to disagree by using angry words. Cooperation means work with others in a way that is productive. Temper means likely to get angry. Disrupt means to put things out of order. In this instance, it is putting situations where a lot of people are together out of order

Social Acceptability means how appropriate or suitable something is for the group of people involved. Impulsive means doing things without careful thought.

The higher your mark on the graph in each of these areas, the stronger you said you were in these areas. Look at your graph for Social Behavior. Choose one area you would like to improve and think about how you might improve. (20 seconds wait)

Academic Behavior is the middle area. This area of behavior includes how you rated yourself on the skills necessary to prepare for, participate in, and learn from academic instruction. The words across the bottom are academic interest, readiness, academic performance, independence, attention, and engagement.

Academic interest means interest in learning at school. Readiness means being prepared. Academic Performance means how someone completes tasks that show their learning at school. Independence means being able to be free from outside help. Attention means carefully thinking about, listening to, or watching someone or something. Engagement means to take part in something.

The higher your mark on the graph in each of these areas, the stronger you said you were in these areas. Look at your graph for Academic Behavior. Choose one area you would like to improve in and think how you might improve. (20 seconds wait)

Emotional Behavior is the last area. This area of behavior includes how you regulate your emotions, react to change, and respond to stressful events. The words across the bottom are sadness, anxious, adaptable, positivity, worry, resilience, and withdrawal.

#### Sadness means unhappiness.

Anxious means being afraid or nervous about what might happen. Adaptable means being able to change when a situation demands it. Positivity means speaking, thinking, or acting as if good outcomes will occur. Worry means to think about something that has or will happen in a way that is not positive. Resilience means to feel or be successful again after something bad happens. Withdrawal means to socially or emotionally move from.

The higher your mark on the graph in each of these areas, the stronger you said you were in these areas. Look at your graph for Emotional Behavior. Choose one area you would like to improve in and think how you might improve. (20 seconds wait)

Now think about all three of the different areas of behavior. Using your graph, pick one overall area you would like to improve on, and use the goal-setting form to set a goal for this area.

(Illuminate Education Inc., n.d.; Koelle et al., Boll, 2019).

After initial goal-setting, weekly goal check-ins via survey provided an opportunity for students to check in on the progress they were making on their chosen goals (see Figure 4). This served two purposes. First, teachers reminded students that they were working on improving their behavior in this specific area. Second, students had the opportunity to adjust their goals. To determine how the goal-setting process for improved behavior increased academic achievement, the researcher compared data from three different benchmarking websites from the beginning to the end of the study. The data were collected for all students, those that utilized the prescribed goal-setting process, and those that used their normal classroom goal-setting processes. Three sources of data were used to provide reliability in the academic achievement students made. These measures of academic achievement are used within the school as part of the typical school programming to determine academic progress.

#### Figure 4

	Yes	No
Did I meet my goal?	0	0
Do I need to make changes to my goal?	0	0
Vhat are my next steps?		

#### Weekly Check-in on Behavior Goal

Five weeks prior to the beginning of the study, the researcher notified teachers in grades three to five at the school site by an in-person presentation of the details of the study. During this time, teachers had the option of continuing their current goal-setting processes as they currently were or using the prescribed goal-setting process for the study. At the time of the presentation, the teachers also received a letter explaining the focus of the research, confidentiality information, and which tools would be used to help students self-assess and set goals, as well as where academic achievement data would be pulled/obtained. Three third grade teachers, one fourth grade teacher, and two fifth grade teachers agreed to participate, responding by electronic mail. One week prior to the study, the teachers received an email reminding them of the study, as well as the components that they would be responsible for implementing in their classrooms.

The mySAEBRS tool is the self-assessment measure connected to the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS) used to universally screen students for emotional and behavioral risks to identify where support is needed (Illuminate Education, n.d.). MySAEBRS is part of the SAEBRS behavior benchmarking tool included in the password-protected FastBridge platform, which includes a range of universal screening tools utilized in many states (Illuminate Education, n.d.). The mySAEBRS is a self-reported screener, and the report from it can be used in conjunction with the SAEBRS report that results from the teacher ratings (Illuminate Education, n.d.). For the purposes of this research, students based their goal-setting solely from their selfrating, without knowing the teacher rating in the same areas. At this particular school, students did not have experience with the mySAEBRS (Illuminate Education, n.d.) screener prior to this research. The mySAEBRS (Illuminate Education, n.d.) screener is comprised of 20 items (Figure 1), for each of which students rate themselves on a Likertlike Scale as Never, Sometimes, Often, or Almost Always, which included accompanying pictures for clarity (Illuminate Education, n.d.). According to Fraenkel et al. (2023), instruments should have validity, reliability, objectivity, and usability, while minimizing

bias. The simplicity of the tool addresses usability, while the nature of self-rating addresses objectivity. Validity demands that the tool measure what it should (Fraenkel et al., 2023), in this case, behaviors as rated by self. The mySAEBRS (Illuminate Education, n.d.) self-assessment provides results based on student self-ratings and factors those results into three categories: social, emotional, and academic. Reliability is that the tool gives consistent results (Fraenkel et al., 2023). In their study, Kilgus et al. (2021) examined the reliability of mySAEBRS (Illuminate Education, n.d.) results across diverse settings. The findings of their study matched those of a study conducted by von der Embse et al. (2017), with conclusions that the mySAEBRS demonstrated consistent internal reliability.

Upon completion of the behavioral self-assessment tool, students filled out a goalsetting form based on the results. Teachers received the goal-setting form in the form of a survey through an emailed link to their password protected email accounts. The teachers shared the link with their students through their password protected email accounts, which students completed along with the accompanying video created to support behavioral self-assessment report analysis, understanding of vocabulary, and the goalsetting process. The goal-setting processes on the goal-setting form was based on Lesson 1: Setting Learning Goals, from the book, *Developing Assessment Capable Visible Learners*, by Frey et al. (2018; See Figure 6). The researcher also created and sent weekly goal check-ins via the same process, so that students would keep their goal in mind and have opportunities to make adjustments, as they saw fit.

Students' names were coded into a password-protected program. The researcher coded student names with a number and letter, noting in which area each student set

goals, and color-coding to the area of behavior they were setting goals. Academic achievement data for each student were collected from each of three password-protected, benchmarking websites, where proficiency is designated for both mathematics and English Language Arts, at the beginning of the study and at the end of the eight weeks for which students completed weekly goal check-ins: IXL Diagnostic (IXL Learning, n.d.), Evaluate (Catapult Learning, n.d.), and FastBridge (n.d.). For the IXL Diagnostic, students' overall reading and math levels were recorded, which are based on the grade level expectations at which they are performing (IXL Learning, n.d.). For Evaluate, the recorded scores were their percentage of answers correct in ELA and Mathematics on grade level standards (Catapult Learning, n.d.) and for FastBridge, their A-Reading and A-Math scores were recorded, which are scale scores based on grade level expectations (FastBridge, n.d.). These sources of academic achievement data are considered secondary sources, as classes completed these benchmarking assessments totally unconnected and separate from the events related to the study and would have completed them regardless of the study. Three sources of academic achievement data were collected, as according to Fraenkel et al. (2023), this serves to enhance the validity of the results by allowing for triangulation. The next step was an analysis and comparison of the academic achievement of students who set goals in the three different behavioral areas (social behavior, academic behavior, and emotional behavior), as well as a comparison of the academic achievement of students who did not set goals for improvement in their behavior, but, rather continued the goal-setting procedure that their teacher employed during this time period (control group).

The researcher analyzed the academic achievement data from several groups. First, the means of the pre- and post-academic achievement data for students who set goals for improvement in Social Behavior were analyzed to determine if the growth was statistically significant. Statistical significance of growth in academic achievement data was determined by applying a *t*-test for dependent means. According to Fraenkel et al. (2023), this test shows whether the difference between the two means is significant. Next, a *t*-test for dependent means was used to determine whether there was statistically significant growth from the pre- and post-academic achievement data for the group of students who set goals for improvement in Academic Behavior. The same process was followed for the final group of students, who set goals to improve their Emotional Behavior. Finally, academic achievement data for those students who set goals using the prescribed process, regardless of the area of behavior, and those who did not was analyzed using the same procedure. An additional *t*-test of independent means was run to compare academic achievement data of those that set goals and those that did not. All ttests were one-tailed as the hypothesis can be supported only if there is a positive difference in the samples (Fraenkel, 2023). The process of analyzing each group's academic achievement data for statistical significance was the best method to determine if the prescribed goal-setting process for improved learner behaviors had a positive impact on student academic achievement.

#### **Data Samples**

The focus of the study was to see how student goal-setting to improve learner behaviors increased their academic achievement scores, as measured by three different academic achievement benchmarking websites: IXL Diagnostic (IXL Learning, n.d.), Evaluate (Catapult Learning, n.d.), and FastBridge (n.d.). The information in this study was conducted using nonrandom, purposive sampling, in order to see what effect this process had on the academic achievement data of intermediate students. Purposive sampling was used "based on previous knowledge of a population and the specific purpose of the research" (Fraenkel et al., 2023, p. 100). Working knowledge of the development and needs of intermediate-level students in a particular setting, combined with the understanding of how goal-setting increases agency, led to creation of the current study, as well as the choice of the study sample.

The sample of teachers in the study included those who teach intermediate level students in grades 3–5. However, within each grade level, teachers could choose to participate in the prescribed goal-setting process from the study or keep their current, non-uniform, goal-setting processes in place. It was expected that about 50% of the teachers would opt in to the process and six out of the 12 teachers did opt to have their students take part in the goal-setting process for the study: three who taught third grade, one who taught fourth grade, and two who taught fifth grade. Though all intermediate students were invited to participate, those students who were absent or out of the classroom while the teachers were implementing the results of the behavioral selfassessment and goal-setting, did not participate. Further, students who did not identify themselves on the goal-setting survey could not be matched with their coded achievement data. Finally, students who did not have achievement data because of extenuating circumstances could not have their data included. This resulted in a total of 74 students, or 68% of the students available, setting goals from the teachers who opted to implement setting goals for improved learner behaviors using the process prescribed in the research

study. This response rate was acceptable to be able to draw conclusions about the data. Of the students who responded, 20 set goals for improved Academic Behaviors, choosing from the different areas within that category to dig deeper into what they wanted to improve. Of those 20 students, nine were female and 11 were male. One student was White, while there were 12 Black students, five Hispanic students, and two multi-racial students. Twenty-four students set goals for improved emotional behavior. Of those 24, nine were male and 15 were female. This group was made up of four White students, 12 Black students, seven Hispanic students, and one multi-racial student. Thirty students set goals for improved social behavior. Of those 30, 15 were male and 15 were female. The group was made up of four White students, 21 Black students, three Hispanic students, and two multi-racial students. The makeup of the group, along with percentages designating males and females, and the race of the students is located in Table 1.

# Table 1

Type of Behavior	Responses	Male	Female	White	Black	Hispanic	Multi- Racial
Goal							
Academic	20	11	9	1	12	5	2
Emotional	24	9	15	4	12	7	1
Social	30	15	15	4	21	3	2
Total	74	35	39	9	45	15	5
Percentages	100	47.3	53.7	12.2	60.8	20.3	6.8

#### Sample Demographics

The National Center for Education Statistics (2022b), presented findings that the race/ethnicity of the students in public education in the fall of 2020 were made up of approximately 46% White students, 15% Black students, 28% Hispanic students, and 5% of student who were two or more races (para. 2). Asian students also made up 5% of the enrolled students in the United States in 2020 (National Center for Education Statistics,

2022b), but were not a significant part of this school's data (para. 2). Based on the findings in the previously mentioned report, the sample of the current study is not representative of the general population of public schools in the United States. This sample does, however, represent the demographic that often occurs in schools in areas with lower-socioeconomic status, as designated by the number of students who receive a free or reduced-price lunch (National Center for Education Statistics, 2022a). In schools that are considered high-poverty, the racial/ethnic makeup in the fall of 2020 was approximately 8% White students, 45% Black students, 43% Hispanic students, and 17% multi-racial students (National Center for Education Statistics, 2022a). Though not exactly the same as the school in the study, these findings, as well as the information in the following section, demonstrate this sample as representative of a specific population that is in special need of educational support to ensure that all students can receive a quality education (Kober et al., 2020).

### Setting

An elementary school was the setting of this research on how goal-setting for improved learner behaviors increases academic achievement. The elementary school included students in grades kindergarten through five and is located in a suburban area in the Midwest of the United States. Table 2 includes the demographic information reported to the state department of education describing the students who attend the school, Table 3 gives characteristics of the staff and building, and Table 4 and Table 5 include achievement data from the Missouri Assessment Program (MAP) for the last three years, available in Communication Arts and Mathematics, respectively. The numbers included in Tables 4 and 5 are the percentage of students that proved to be Proficient or Advanced in that grade level for that testing year. One year of achievement data is not included in

the table, because testing was not done during the COVID-19 pandemic.

# Table 2

# School Demographics

Number of Students K–5	526	
Average Daily Attendance	90.38%	
Percentage of Free and Reduced Lunch	100%	
White	13.3%	
Black	52.9%	
Hispanic	24.3%	
Multi-Racial	8.6%	

Note. (Comprehensive School Data System, n.d.).

# Table 3

## School Characteristics

Administrator Average Years of Experience	19	
Teacher Average Years of Experience	12.9	
Percentage of Teachers with Master's Degree or Higher	64%	
Students per Classroom Teacher	18.5	
		-

Note. (Comprehensive School Data System, n.d.).

# Table 4

#### Students Proficient or Advanced on MAP Communication Arts

Year Assessed	2017	2018	2019	2020
District Scores	46.9%	36.8%	34.2%	-
School Scores	48.0%	41.1%	30.8%	-

Note. (Comprehensive School Data System, n.d.).

### Table 5

### Students Proficient or Advances on MAP Mathematics

Year Assessed	2017	2018	2019	2020
<b>District Scores</b>	32.8%	29.8%	28.2%	-
School Scores	37.8%	39.1%	32.6%	-

Note. (Comprehensive School Data System, n.d.).

#### **Threats to Validity**

### Internal Validity

When conducting research, it is important to plan for threats to internal validity. Fraenkel et al. (2023) declared this a key part of planning a study so that "observed differences on the dependent variable are directly related to the independent variable, and not due to some other unintended variable" (p. 166). Without this consideration, generalizations about data are difficult to make. To account for the threat to fidelity, all teachers were fully informed of the steps of the project and were sent weekly email reminders of when to complete the goal-setting survey and weekly goal check-ins with their students. All materials were at a low readability level and the video explained vocabulary definitions of words that may have been at a higher level. This was done to account for students who were English learners and those who were not reading on grade level. To account for the validity threat of students not using their best effort on achievement benchmarks, teachers allowed students who were upset to take them another day and there were class-wide and individual incentives for students to make growth.

Though the researcher was an employee of the district and school studied, the teachers implemented the goal-setting processes in their classroom as part of normal classroom procedures. Likewise, students completed the benchmark assessments, as normally done, in the classes where the students complete their day-to-day work. The students were unaware that their principal was the one completing the study or that they were taking part in anything other than their normal goal-setting routines. This was done purposely to avoid data collector bias.

The researcher used information from the student goal-setting worksheets to determine the behavior area within which the students were setting their goals. However, to plan for transiency the school, and likely the sample for this study, any student who left or came during the study would not have their goal-setting information or academic achievement data included, as it would not reflect the full scope of the study.

Inherently, the researcher had interest in the study subject. Because of the connection to the school, staff, students, topic, and education, in general, there was an innate hope that the researcher found specific results that would make a difference for these stakeholders and society, in general. As such, steps were taken to ensure that this hope did not impact the conclusions or results of the study. One step taken by the researcher was the use of quantitative results to show academic achievement, triangulated through three sources regularly used at the site, without researcher interference or presence. An additional step taken by the researcher to account for potential reflexivity was allowing teachers the choice to opt-in or use their own goal-setting procedures. By these different means, the researcher negated any desire for specific results or conclusions. Finally, coding students by applying a letter and number combination before analysis occurred, which allowed student information to remain anonymous.

#### External Validity

External validity refers to the ability to apply the information learned from the results of the study in other areas (Fraenkel et al., 2023). Though the school had a diverse population, there were few affluent students in the school. The study results came from one Midwestern school in the United States. Therefore, though this may have kept the results from generalization to the whole population of intermediate students, the

information could have been applied to those that are most resource-poor (often schools that have the most difficult time showing significant learning gains).

# Summary

The information from this study provided insight into the usefulness of goalsetting for improvements in behavior for increasing academic achievement in the intermediate elementary grades. Chapter Three included the goals and purpose of the study, as well as the methodology used during the study. Through this methodology, learners were engaged in their own understanding and growth related to their socialemotional skills. In Chapter Four, the researcher examines how setting goals for improvement and bringing a greater awareness to their agency as learners, impacted students' academic achievement.

#### **Chapter Four: Analysis**

# Overview

Although the importance of SEL is becoming more prominent in education, there has been little research done to determine what positive impact student goal-setting to improve learning behaviors has on academic achievement (Kanopka et al., 2020; Sides & Cuevas, 2020). The purpose of this study was to determine the increase student goalsetting for improved learner behaviors had on academic progress for intermediate students in grades 3–5. The analysis in Chapter Four includes the results from the study. The results include how this prescribed method of goal-setting for different aspects of behavioral improvement impacted student achievement in reading and math in one elementary school setting. Students assessed themselves through an online benchmarking assessment called mySAEBRS on the FastBridge (Illuminate Education, n.d.) platform. Based upon the results, students set goals for behavioral improvement in one behavioral area (academic, social, or emotional) using a *Qualtrics* survey, based on the goal-setting template in Frey et al. (2018). Data collected also included goal-setting information as qualitative data. The researcher matched student names with a number and letter on one spreadsheet. On another spreadsheet, the data were matched to the students' numberletter combinations, upon which names were no longer used. This occurred before any data analysis by the researcher.

At the beginning of the study, academic achievement data were collected as secondary quantitative data from three password-protected, online benchmarking websites already in regular use at the school: The IXL Diagnostic (IXL Learning, n.d.), Evaluate (Catapult Learning, n.d.), and FastBridge screening (Illuminate Education, n.d.). Once students set goals, they checked in weekly, via an additional *Qualtrics* survey, to reflect on their goal progress or make adjustments through an emailed link. When the study concluded after eight weekly check-ins, the researcher collected additional secondary academic data from the same three, password-protected websites approved during the IRB process. Beyond the analysis of the statistical significance of the differences in student achievement for students who set goals, a comparison of academic achievement for those students who set goals and those who did not was also included. The analysis of pre- and post-study academic benchmarking scores for each of the Null Hypotheses follows a review of instrumentation.

#### **Tools and Methodology**

In this study, students used the behavioral self-assessment tool, mySAEBRS (Illuminate Education, n.d.), to rate their behavior. As indicated previously, the mySAEBRS (Illuminate Education, n.d.) was a 20-question behavioral self-assessment tool students took to share their self-rating in three different categories of behavior: Social, Academic, and Emotional. The mySAEBRS (Illuminate Education, n.d.) screener was comprised of 20 items (See Figure 1), for which students rated themselves on a Likert-like scale as Never, Sometimes, Often, or Almost Always experiencing. Upon completion of the self-rating, students received a report detailing their scores in three academic areas, as noted in Figure 5.



Example of mySAEBRS (Illuminate Education, n.d.) Behavior Report

Note. (Illuminate Education, n.d.)

The results informed students of goal-setting areas to improve their behavior. Using a goal-setting form (Figure 2) modified from the Frey et al. (2018) goal-setting form in Lesson 1: Setting Learning Goals from *Developing Assessment Capable Visible Learners* (Figure 6), students set goals for behavioral improvement in one of the three areas: Academic, Social, or Emotional.

Setting Learning Goals Goal-Setting Form

My Lea	rning Goal
Date:	What is my LEARNING GOAL?
6	Why is it my LEARNING GOAL?
2	What am I going to do to meet my LEARNING GOAL?
3	How will I know if I made progress toward meeting my LEARNING GOAL?

The researcher analyzed the goal-setting results to determine the number of students who set goals in each area.

Note. (Fisher et al., 2019)

Learning Goal Checklist

Related Learner's Notebook Page
Setting Learning Goals
My Learning Goal Checklist Date:
My learning goal is focused on something I need to get better at.
I wrote why my learning goal is an important goal for me.
I have a plan to meet my learning goal.
I identified evidence or proof I will use to know if I am making progress toward meeting my learning goal.
I shared my learning goal with a peer who double-checked I had everything I needed.
(Cantinued)
Derryf # 17.7 a Denk all gesconent

Note. (Fisher et al., 2019)

1 Setting I	Related <i>Learner's Notebook</i> Page
	My Learning Goal Checklist (continued)
C	Did I meet my learning goal?
	Do I have to make any changes to my learning goal?
	What is my next learning step?
6	

Note. (Fisher et al., 2019)

An additional inclusion was the analysis of demographic data for students who did not use the study-prescribed goal-setting process. Table 6 includes these results.

## Table 6

Type of Goal Set	Number of Responses	М	F	W	В	Н	M-R	А
Academic Behavior	20	11	9	1	12	5	2	0
Emotional Behavior	24	9	15	4	12	7	5	0
Social Behavior	30	15	15	4	21	3	2	0
Goal-setting	74	35	39	9	45	15	5	0
Percentages of Sample	100	47.3	53.7	12.2	60.8	20.3	6.8	0
No Goal Set	139	64	75	16	82	30	9	2

# Demographics of Students Participants

Note. M=Male, F=Female, W=White, B=Black, H=Hispanic, M-R=Multi-racial, A=Asian

Chapter Five includes a section addressing the research questions utilizing these data. However, these data also paint the picture of the participants who set goals to improve their behavior, as well as those who did not. For academic achievement data, notes for individual tables indicate, for each benchmarking tool, the sample population, based on data mortality from students who did not take a particular benchmark. Though mortality affected some benchmarks more than others, the significance of scores based on an overall difference in means did not limit the ability of the researcher to use the data.

The researcher ran a *t*-test of dependent means with a statistical calculator utilizing the mean, standard deviation, and degrees of freedom for the differences in the data, using a critical value of .05 to reveal a *t*-score and *p*-value for each benchmark for each type of goal set. The analyses of these statistical tests for pre- and post-study academic achievement data addressed the Null Hypotheses in this chapter. Additionally, a *t*-test of independent means determined statistical significance comparing the means of differences in students who set goals using the process prescribed in the study and those that followed their teachers regularly used goal-setting process. Themes from the Research Questions and further analysis are discussed in Chapter Five.

# **Null Hypotheses**

**Null Hypothesis 1**: Student goal-setting for improved social behavior does not increase academic achievement.

Student goal-setting results and data taken from academic benchmarks (IXL Learning, n.d.; Catapult Learning, n.d.; FastBridge, n.d.) pre- and post-study addressed this research question. After completion of the mySAEBRS (Illuminate Education, n.d.), 30 students set goals to improve different aspects of their Social behavior. Academic achievement data were collected for these students at the time of their initial goal-setting. After eight weekly check-ins of their goal progress using a *Qualtrics* check-in based on the Frey et al. (2018), Learning Goal Checklist, academic achievement data were collected again. The researcher determined the mean differences of the pre- and poststudy academic achievement and ran a dependent sample *t*-tests on the differences to determine statistical significance.

## Table 7

	Mean Difference in Scores	Standard Deviation	p-value	Statistical Significance y/n
Math				
IXL Overall	16.17	28.18	.002	У
Evaluate	2.55	11.89	.129	n
aMath	3.54	5.64	.001	У
Reading				
IXL Overall	36.3	57.77	.002	У
Evaluate	-1.21	14.41	.673	n
aReading	7.25	18.89	.026	У

Results of Student Scores for Students Who Set Social Behavior Goals

Note. Based on mortality, an adjusted n for each benchmark was used.

Math IXL Overall n = 30; Math Evaluate n = 29; aMath n = 29; Reading IXL Overall n = 27; Evaluate Reading n = 29; aReading n = 28.

The researcher conducted a one-sample *t*-test on the differences in the academic scores for students who set goals to improve their Social Behavior. The IXL math overall results showed that the increases in scores (M = 16.17, SD = 28.18) were significant; t(30) = 3.143, p = .002. The researcher rejected the null hypothesis and concluded that the IXL math scores were higher after setting behavior goals. The Evaluate math results showed that the increases in scores (M = 2.55, SD = 11.89) were not significant; t(29) = 1.155, p = .129. The researcher failed to reject the null hypothesis and concluded that the Evaluate math scores were not higher after setting behavior goals. The aMath results showed that the increases in scores (M = 3.54, SD = 5.64) were significant; t(29) = 3.380, p = .001. The researcher rejected the null hypothesis and concluded that the aMath scores

were higher after setting behavior goals. The IXL reading overall results showed that the increases in scores (M = 36.3, SD = 57.77) were significant; t(27) = 3.265, p = .002. The researcher rejected the null hypothesis and concluded that the IXL reading scores were higher after setting behavior goals. The Evaluate reading results showed that decreases in scores (M = -1.21, SD = 14.41) were not significant; t(29) = .452, p = .673. The researcher failed to reject the null hypothesis and concluded that the Evaluate reading scores were not higher after setting behavior goals. The aReading results showed that the increases in scores (M = 7.25, SD = 18.89) were significant; t(28) = 2.031, p = .026. The researcher rejected the null hypothesis and concluded that the aReading scores were higher after setting behavior goals.

**Null Hypothesis 2:** Student goal-setting for improved academic behavior does not increase academic achievement.

Student goal-setting results and data taken from academic benchmarks (IXL Learning, n.d.; Catapult Learning, n.d.; FastBridge, n.d.) pre- and post-study addressed this research question. After completion of the mySAEBRS (Illuminate Education, n.d.), 20 students set goals to improve different aspects of their Academic Behavior. Academic achievement data were collected for these students at the time of their initial goal-setting. Table 8 displays the results of the statistical tests.
## Table 8

	Mean Difference In Scores	Standard Deviation	p-value	Statistical Significance y/n
Math				
IXL Overall	3.16	35.79	.352	n
Evaluate	5.22	13.15	.055	n
aMath	1.15	2.89	.046	У
Reading				
IXL Overall	11.47	53.20	.194	n
Evaluate	1.94	15.79	.305	n
aReading	2.60	6.44	.043	У

Results of Student Scores for Students Who Set Academic Goals

*Note.* Based on mortality, the researcher used an adjusted n for each benchmark.

Math IXL Overall n = 19; Math Evaluate n = 18; aMath n = 20; Reading IXL Overall n = 17; Evaluate Reading n = 18; aReading n = 20.

After eight weekly check-ins of their goal progress, academic achievement data were collected again. The researcher determined the mean differences of the pre- and post-study academic achievement and ran a dependent sample *t*-tests on the differences to determine statistical significance.

The researcher conducted a one-sample dependent *t*-test on the differences in the academic scores for students who set goals to improve their Academic Behavior. The IXL math overall results showed that the increases in scores (M = 3.16, SD = 35.79) were not significant; t(19) = .385, p = .352. The researcher failed to reject the null hypothesis and concluded that the IXL math scores were not higher after setting academic goals. The Evaluate math results showed that the increases in scores (M = 5.22, SD = 13.15) were not significant; t(18) = 1.684, p = .055. The researcher failed to reject the null hypothesis

and concluded that Evaluate math scores were not higher after setting academic goals. The aMath results showed that the increases in scores (M = 1.15, SD = 2.89) were significant; t(20) = 1.78, p = .046. The researcher rejected the null hypothesis and concluded that the IXL math scores were higher after setting academic goals. The IXL reading overall results showed that the increases in scores (M = 11.47, SD = 53.20) were not significant; t(17) = .889, p = .194. The researcher failed to reject the null hypothesis and concluded that the IXL reading scores were not higher after setting academic goals. The Evaluate reading results showed that the increases in scores (M = 1.94, SD = 15.79) were not significant; t(18) = .521, p = .305. The researcher failed to reject the null hypothesis and concluded that the Evaluate reading scores were not higher after setting academic goals. The aReading results showed that the increases in scores (M = 2.60, SD = 6.44) were significant; t(20) = 1.806, p = .043. The researcher rejected the null hypothesis and concluded that the aReading scores were higher after setting academic goals.

**Null Hypothesis 3**: Student goal-setting for improved emotional behavior does not increase academic achievement.

Student goal-setting results and data taken from academic benchmarks (IXL Learning, n.d.; Catapult Learning, n.d.; FastBridge, n.d.) pre- and post-study addressed this research question. After completion of the mySAEBRS, 24 students set goals to improve different aspects of their Emotional Behavior. Academic achievement data were collected for these students at the time of their initial goal-setting. After eight weekly check-ins of their goal progress, academic achievement data were collected again. The researcher determined the mean differences of the pre- and post-study academic achievement and ran dependent sample *t*-tests on the differences to determine statistical significance. Table 9 displays the results of the statistical tests.

## Table 9

	Mean Difference in Scores	Standard Deviation	p-value	Statistical Significance y/n
Math				
IXL Overall	-4.32	30.48	.743	n
Evaluate	-1.17	14.45	.649	n
aMath	2.19	3.53	.005	У
Reading				
IXL Overall	15.65	59.26	.115	n
Evaluate	-3.04	12.34	.875	n
aReading	0.67	7.81	.353	n

Results of Student Scores for Students Who Set Emotional Goals

*Note.* Based on mortality, the researcher used an adjusted n for each benchmark.

Math IXL Overall n = 22; Math Evaluate n = 23; aMath n = 21; Reading IXL Overall n = 22; Evaluate Reading n = 23; aReading n = 20.

The researcher conducted a one-sample *t*-test on the differences in the academic scores for students who set goals to improve their Emotional Behavior. The IXL math overall results showed that the decrease in scores (M = -4.32, SD = 30.48) were not significant; t(22) = -.665, p = .743. The researcher failed to reject the null hypothesis and concluded that the IXL math scores were not higher after setting emotional goals. The Evaluate math results showed that the decrease in scores (M = -1.17, SD = 14.45) were not significant; t(23) = -.388, p = .649. The researcher failed to reject the null hypothesis and concluded that the Evaluate math scores were not higher after setting emotional goals. The adath results showed that the increase in scores (M = 2.19, SD = 3.53) were

significant; t(21) = 2.843, p = .005. The researcher rejected the null hypothesis and concluded that the aMath scores were higher after setting emotional goals. The IXL reading overall results showed that the increase in scores (M = 15.65, SD = 59.26) were not significant; t(22) = 1.239, p = .115. The researcher failed to reject the null hypothesis and concluded that the IXL reading scores were not higher after setting emotional goals. The Evaluate reading results showed that the decrease in scores (M = -3.04, SD = 12.34) were not significant; t(23) = -1.181, p = .875. The researcher failed to reject the null hypothesis and concluded that the Evaluate reading scores were not higher after setting emotional goals. The aReading results showed that the increase in scores (M = .67, SD =7.81) were not significant; t(20) = .384, p = .353. The researcher failed to reject the null hypothesis and concluded that the aReading scores were not higher after setting emotional goals. The aReading results showed that the increase in scores (M = .67, SD =7.81) were not significant; t(20) = .384, p = .353. The researcher failed to reject the null hypothesis and concluded that the aReading scores were not higher after setting emotional goals.

**Null Hypothesis 4**: Student goal-setting to improve learner behaviors does not increase academic achievement.

Student goal-setting results and data taken from academic benchmarks (Catapult Learning, n.d.; FastBridge, n.d.; IXL Learning, n.d.) pre- and post-study addressed this research question. After completion of the mySAEBRS, 74 students set goals using the study-prescribed process to improve different aspects of their behavior. However, 139 students in grades 3–5 did not use the prescribed goal-setting process. Academic achievement data were collected for all students when the initial goal-setting for the study began. After eight weekly check-ins of their goal progress, academic achievement data were collected again. The researcher determined the mean differences of the pre- and post-study academic achievement for both groups of students and ran a dependent sample

*t*-tests on the differences to determine statistical significance. Table 10 displays the results of the statistical tests.

# Table 10

Results of Student Scores Comparing Students Who Set Goals with Control Group

	Mean Difference in Scores		Standard Deviation		p-value		Statistical Significance y/n	
	Goal- setting	Control	Goal- setting	Control	Goal- setting	Control	Goal- setting	Control
Math								
IXL Overall	6.34	17.66	31.89	49.06	.049	<i>p</i> < .001	У	У
Evaluate	2.01	7.78	13.14	14.97	.102	<i>p</i> < .001	n	У
aMath	2.40	1.11	4.38	5.36	<i>p</i> < .001	.013	у	У
Reading								
IXL Overall	22.91	19.91	57.42	67.52	.001	.013	у	У
Evaluate	-1	2.09	14.07	13.81	.723	.051	n	n
aReading	4.13	3.99	13.42	14.99	.007	.002	У	У

Note. Based on mortality, the researcher used an adjusted n for each benchmark.

Goal-setting: Math IXL Overall n = 71; Math n = 70; aMath n = 67; Reading IXL Overall n = 67; Evaluate Reading n = 70; aReading n = 68.

Control: Math IXL Overall n = 124; Math Evaluate n = 123; aMath n = 120; Reading IXL Overall n = 109; Evaluate Reading n = 118; aReading n = 129.

The researcher conducted a one-sample *t*-test on the differences in the academic scores for students who set goals to improve their behavior, as well as for the differences in academic scores for students that did not follow the prescribed goal-setting. The IXL math overall results for goal-setting showed that the increase in scores (M = 6.34, SD =

31.89) were significant; t(71) = 1.675, p = .049. The researcher rejected the null hypothesis and concluded that the IXL math scores were higher after goal setting. The IXL math overall results control group showed that the increase in scores (M = 17.99, SD = 49.06) were significant; t(124) = 4.008, p < .001 The researcher rejected the null hypothesis and concluded that the IXL math scores for the control group did increase. The Evaluate math results for goal-setting showed that the increase in scores (M = 2.01, SD = 13.14) were not significant; t(70) = 1.280, p = .102. The researcher failed to reject the null hypothesis and concluded that the Evaluate math scores were not higher after goal setting. The Evaluate math results control group showed that the increase in scores (M = 7.78, SD = 14.97) were significant; t(123) = 5.764, p < .001 The researcher rejected the null hypothesis and concluded that the Evaluate math scores for the control group did increase. The aMath results for goal-setting showed that the increase in scores (M = 2.40, SD = 4.38) were significant; t(67) = 4.485, p < .001. The researcher rejected the null hypothesis and concluded that the aMath scores were higher after goal setting. The aMath results control group showed that the increase in scores (M = 1.11, SD = 5.36) were significant; t(120) = 2.269, p=.013. The researcher rejected the null hypothesis and concluded that the aMath scores for the control group did increase.

Next the researcher examined Reading results. The IXL overall reading results for goal-setting showed that the increase in scores (M = 22.91, SD = 57.42) were significant; t(67) = 3.267, p = .001. The researcher rejected the null hypothesis and concluded that the IXL overall reading scores were higher after goal setting. The IXL overall reading results control group showed that the increase in scores (M = 19.91, SD = 67.52) were significant; t(109) = 3.079, p = .013. The researcher rejected the null hypothesis and

concluded that the IXL overall reading scores for the control group did increase. The Evaluate reading results for goal-setting showed that the decrease in scores (M = -1, SD = 14.07) were not significant; t(70) = -.595, p = .723. The researcher failed to reject the null hypothesis and concluded that the Evaluate reading scores were not higher after goal setting. The Evaluate reading results control group showed that the increase in scores (M = 2.09, SD = 13.81) were not significant; t(118) = 1.644, p = .051. The researcher failed to reject the null hypothesis and concluded that the Evaluate reading scores for the control group did not increase. The aReading results for goal-setting showed that the increase in scores (M = 4.13, SD = 13.42) were significant; t(68) = 2.538, p = .007. The researcher rejected the null hypothesis and concluded that the aReading scores were higher after goal setting. The aReading results control group showed that the increase in scores (M = 3.99, SD = 14.99) were significant; t(129) = 3.023, p = .002. The researcher rejected the null hypothesis and concluded that the aReading scores for the control group did increase.

# Table 11

Independent T-Test: Results of Student Scores Comparing Students Who Set Goals with

Control	l Group

	Mean Difference in Scores		Stand Devia	Standard Deviation		Statistical Significance y/n
	Goal-setting	Control	Goal- setting	Control		
Math						
IXL Overall	6.34	17.66	31.89	49.06	.983	n
Evaluate	2.01	7.78	13.14	14.97	.997	n
aMath	2.40	1.11	4.38	5.36	.039	У
Reading						
IXL Overall	22.91	19.91	57.42	67.52	.377	n
Evaluate	-1	2.09	14.07	13.81	.926	n
aReading	4.13	3.99	13.42	14.99	.472	n

*Note.* Based on mortality, the researcher used an adjusted n for each benchmark.

Goal-setting: Math IXL Overall n = 71; Math n = 70; aMath n = 67; Reading IXL Overall n = 67; Evaluate Reading n = 70; aReading n = 68.

Control: Math IXL Overall n = 124; Math Evaluate n = 123; aMath n = 120; Reading IXL Overall n = 109; Evaluate Reading n = 118; aReading n = 129.

Further, the researcher conducted a t-test of two independent means to see students setting goals had a higher increase in scores than those in the control group and did not set goals. For IXL overall math scores, the analysis revealed that goal-setting students (M = 6.34, SD = 31.89) were not significantly higher than the control group (M =

17.66, SD = 49.06; t(124) = -2.147, p = .983. The researcher failed to reject the null hypothesis and concluded that the goal-setting students did not have a higher increase in scores than the control group. For Evaluate math scores, the analysis revealed that goalsetting students (M = 2.01, SD = 13.14) were not significantly higher than the control group (M = 7.78, SD = 14.97); t(123) = -2.786, p = .998. The researcher failed to reject the null hypothesis and concluded that the goal-setting students did not have a higher increase in scores than the control group. For aMath scores, the analysis revealed that goal-setting students (M = 2.40, SD = 4.38) were significantly higher than the control group (M = 1.11, SD = 5.36); t(119) = 1.779, p = .039. The researcher rejected the null hypothesis and concluded that the goal-setting students did have a higher increase in scores than the control group. For IXL overall reading scores, the analysis revealed that goal-setting students (M = 22.91, SD = 57.41) were not significantly higher than the control group (M = 19.91, SD = 67.52); t(109) = .314, p = .377. The researcher failed to reject the null hypothesis and concluded that the goal-setting students did not have a higher increase in scores than the control group. For Evaluate reading scores, the analysis revealed that goal-setting students (M = -1, SD = 14.07) were not significantly higher than the control group (M = 2.09, SD = 13.81); t(118) = -1.456, p = .926. The researcher failed to reject the null hypothesis and concluded that the goal-setting students did not have a higher increase in scores than the control group. For aReading scores, the analysis revealed that goal-setting students (M = 4.13, SD = 13.42) were not significantly higher than the control group (M = 3.99, SD = 14.99); t(129) = .070, p = .472. The researcher failed to reject the null hypothesis and concluded that the goal-setting students did not have a higher increase in scores than the control group.

# Summary

Chapter Four included the results of the study related to each of the research questions, as well as how setting goals for behavioral improvement in Academic, Social, or Emotional increased academic achievement. The quantitative data suggested that this goal-setting process did, at times, have a significant positive impact on academic achievement. The researcher addressed qualitative implications in Chapter Five by explaining themes of the research, along with further analysis of the study and possibilities for future study.

### **Chapter Five: Discussion**

## Overview

Throughout this study, the researcher aimed to investigate the impact of students' goal-setting to improve their behavior on academic achievement. Teachers of students in a public, suburban Midwestern elementary school in grades three through five could optin to the prescribed goal-setting process or chose to continue to use their own, nonuniform processes. Students of the teachers who opted-in self-assessed their behavior using the mySAEBRS Self-Assessment of Behavior through the FastBridge benchmarking platform. The test results rated students in three areas of behavior, including their Academic Behavior, Emotional Behavior, and Social Behavior. From these results, students set goals to improve their behavior and had eight independent weekly check-ins to see if there was anything they wanted to adjust to their goal. To measure academic progress during this process, the researcher collected data from three benchmarking websites already used by the school at the time of the initial goal-setting and at the end of the weekly check-ins. Academic progress data were collected for students who accessed the goal-setting process and those who did not. The researcher analyzed the differences in the scores for significance for those students who set goals in the three specific areas of Academic Behavior, Social Behavior, and Emotional Behavior, as well as for comparison of those who set goals and those who did not. Through this investigation, the researcher hoped to determine an avenue to connect social-emotional goal-setting with greater academic achievement by addressing the Null Hypotheses and Research Questions. The statistical analyses revealed significant growth in some academic benchmarking scores and no statistically significant growth in other

benchmarking scores for students who set goals to improve their behavior following the study-prescribed process.

### Null Hypothesis 1 Discussion

Analysis revealed that students who set goals for improved social behavior showed significant academic growth on several benchmarking tests. For Math IXL Overall, aMath, Reading IXL Overall, and aReading, p-Values showed statistically significant growth, so the researcher rejected Null Hypothesis 1 for these benchmarking assessments. On the contrary, Evaluate Math and Evaluate Reading p-values did not show statistically significant growth, so the researcher failed to reject Null Hypothesis 1 for these benchmarking assessments. Some academic benchmarking results supported that setting goals for improving behavior related to social interactions positively affected academic achievement. The mean difference in scores for IXL tests demonstrated the expected academic growth for the period of time. A math mean difference of 16.17 was equivalent to approximately 16% of the year, while the 8-week period was equivalent to approximately 23% of the year (eight weeks out of the 35 students attended school). For IXL Reading, the overall mean difference of 36.3 was equivalent to approximately 36% of the year, while the eight-week period was equivalent to approximately 23% of the year. On, IXL Reading Overall scores, students grew more, on average, than expected by the IXL program on their grade level standards (IXL Learning, n.d.). The results indicated that goal-setting for improved social behavior did result in some statistically significant progress, though not for Reading or math Evaluate. The difference in the statistical significance may have resulted from the application-style questions asked on Evaluate, with the potential for multiple correct answers (Catapult, n.d.). On the contrary, IXL and aMath and aReading questions are often more specifically skill based (Illuminate Education, n.d.; IXL Learning, n.d.).

## **Research Question 1 Discussion**

How does student goal-setting for improved social behavior increase academic achievement?

When students set goals for improvement in Social Behavior, they had to state their goal, why they chose the goal, what they would do to improve the goal, and how they would know they had made progress. Of the students who set goals based on their mySAEBRS results, the greatest number of students chose to set goals in social behavioral improvement. There are likely several reasons for this. Though they used their mySAEBRS results, many students possibly felt the lack of social practice resulting from the COVID-19 pandemic. Grygarová et al. (2022) revealed that lockdowns led to people no longer being allowed to move about freely, which resulted in social isolation. Student responses reflected the impact of social isolation and the need for learning to work with others. Table 12 displays examples of Social Behavior goals students set, which reflected their interest in improving in sociability.

# Table 12

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
			First, I will accept more	With any many taxable m
Male	Social Acceptability	Because I don't accept any apologies.	take responsibility for what I did.	doesn't have to talk to me for stupid stuff.
			I will not argue with	
Male	Social	I need to work on it.	people.	I will ask someone.
Male	r want to cooperate more with my partner	Because I want to talk more to partner Because I need to	work time, I will not waste time in group work	If I am talking first and talking more than I usually am
		work on working		If they maybe learn how
Male	Cooperation	through the questions instead of just giving them the answer.	Try to show my work more, try to be more talkative.	to solve a question without getting confused.
	I will treat	Because sometimes I		
	my	want to hurt people	I will tell the teacher,	
Famala	classmates with respect	but I know that's not	use the calm down	Um I won't miss recess
Temate	To work	because I don't work	space, ask for a break	Oni, I won't miss recess
	with people	with some people that	work with people even	if i work well with
Male	more	well	more	people more
	To be more	baaayaa Uknow Lam	I could be around	I will want to be around
Male	social	not verv social	more	people more
		, j <i></i>		I will know how to do it
		sometimes I don't	listen more engage	I won't need to ask for
Male	cooperation	cooperate	more ask for help	help
				When we are doing
				and getting work done
		Because I want to get	By starting to pay more	fast and will be
		better at working	attention with my	important goal to get
Female	cooperation.	together.	group.	more stuff done faster.

# Examples of Social Behavior Goals for Improved Sociability

*Note.* These are examples of Social Behavior goals set by n = 30 students.

Additionally, According to Tortella et al. (2021), stress and other negative emotional states block neural pathway growth and other important cognitive processes, such as emotional regulation. During the 2020–2021 school year, students at this school site participated in virtual or hybrid instruction. The noted stress and isolation from these circumstances (Grygarová et al., 2022; Tortella et al., 2021) negatively influenced socialemotional and academic learning. Guazzini et al. (2022) argued that, upon returning to school, the social isolation caused by virtual learning resulted in a sense of alienation, lack of belonging, and detriment to social relationships. Student responses reflected the negative impact of social isolation on students' abilities to have positive relationships in which they could navigate adversity. Table 13 displays examples of Social Behavior goals students set, which reflected their interest in improving navigating conflict.

# Table 13

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
Female	My goal is improve to others	Because I want other people to like Because I know I	1 I will help other people on their work 2 I ask for a break when I am mad	I will just ask my teacher
Female	Arguing.	can control myself but sometimes I don't.	be good, when some body tell you to do something just do it.	listening to myself.
	I will not argue with others when they	because people	I won't argue with	I will know because I
Male	argue with me	argue with me	them back 1. I will be calm 2. I	won't lose recess
Female	To not argue as much	lot. It not only makes me mad but other people too I chose social	3. I will exclude myself from talking on and on	I will have less arguments with friends and family
Female	social Behavior	behavior because I feel like I argue with alot of people and I shouldn't because it's not healthy	I will take deep breaths count to ten and just walk away from the person I'm arguing with	how I will know is when I do the steps and stop arguing with people
Female	arguing	because it was so high	I can take deep breaths	I will ask my friends how I am doing

Examples of Social Behavior Goals for Navigating Conflict

Male Female	No more arguing. Temper	I argue to much. because I lose my temper often in social behavior	saying what ever and move along. I can stop getting mad by calming down or taking a deep a breath	By saying what ever and move along. because I will feel great, and I will not get in trouble.
Male	to control temper	because I get mad a lot for what I did	be happy 1. be nicer, 2. say nice	angry for something i did
Female	to not to have tempers	because being angry is not a great thing	things, 3. forgive people, 4. stop being angry	I will sound nicer.
Female	I will not lose my temper	because I need to learn to calm down. I am losing and getting phone calls home Why I choose it? Because sometimes I get angry for people like	I will use a calm down strategy, I will use the calm down strategy,	If I have recess, if I get a positive phone call
Male	My goal is to work on my temper.	annoying me, and people can not say word is are mean to me.	Step 1. Stop. Step 2. Name your feeling. Step 3. and Calm down.	I know I need to be to control my temper.
Female	To manage and take control over my temper.	Because I have a hard time controlling my temper.	1. Take deep breathes before\when I get upset. 2. Tell the person how I feel and how it effected me. 3. Let that person know that I what they said made me feel some type of way.	I'll feel calmer and less hot headed.
Male	to calm and maintain my temper	I selected social behavior mainly because of my temper. and I chose this goal because I want to be able to manage my temper.	1. think about positive things in bad moments. 2. ignore bad comments. 3. take 5 deep breaths. 4. listen to calming music.	how I would know is if someone says a bad comment about me and I don't get mad or if I don't get mad easily.

*Note.* These are examples of Social Behavior goals set by n = 30 students.

In addition, when students at the study site had in-person instruction, safety precautions were in place that limited their ability to interact socially with peers in an educational setting, including social distancing, limiting movement within the school, and interactions related to their learning. Tortella et al. (2021) asserted that social distancing increased feelings of loneliness and decreased the positive social aspects of education that motivate learning.

This social distancing extended, for many, to the home environment, with lockdowns and many concerns about exposure to other children. Because of this lack of in-person social interaction, many children moved interactions online (Guazzini et al., 2022). In their study, Grygarová et al. (2022) found that poorer self-reported mental health positively correlated with increased news and social media consumption. Despite the potential positive aspects, social media interactions did not provide the immediate feedback and non-verbal communication cues that in-person social interactions teach. Often, social media portrays only the positive aspects of the lives of others or extreme negativity, which sends a message to children with little exposure; otherwise, that this is the usual way of things. Children express boredom with the lack of instant gratification real life provides as a by-product of this experience. Tortella et al. (2021) declared that as student social media use increased during the pandemic, so did psychological distress. Student responses reflected students' desires to improve their understanding of how to act socially as students in classrooms. Table 14 displays examples of Social Behavior goals students set, which reflected their interest in improving their abilities to exhibit appropriate student behaviors.

# Table 14

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
	My goal is to try	I chose this goal because I want to go on in life and have my teacher one day	1. Pay attention in class and not have my teacher wait for me. 2.	I think that it will
Female	disrupt my class.	disrupted my class.	suppose to.	my grades.
Male	disrupt	room is loud	shutup	the class will be quiet have positive phone
Famala	to not disrupt the	because when I disrupt the class, I disrupt the learning and waste learning	raise my hand, use calm down space,	call home, I get recess back, and my teachers tells me I am doing
Pennare	to not be	because Lam	to calm down and	not pushing someone
Male	impulsive.	aggressive.	take deep breaths.	someone. If I notice I am always in a rush, I am still impulsive If I'm
Mala	Impulsive	Because I don't always think before I	Loop stop and thick	stopping and thinking I will know I'm doing
wale	impuisive	acı.	i can stop and think.	better.

## Examples of Social Behavior Goals for Appropriate Student Behaviors

*Note.* These are examples of Social Behavior goals set by n = 30 students.

In accordance, Grygarová et al. (2022) uncovered that social media practice was a media use factor that predicted the highest levels of anxiety and depression. This feeling is also true for children at the age of those in this study (in grades 3–5) who are starting to become more aware of the importance of peers. As one student who aimed to improve their Social Behavior mentioned, "I worry all the time."

It may be for both timing of the pandemic and because of the natural transitions of puberty and ending elementary school that an equal number of boys and girls chose this as their goal area, indicating this was the area of highest need and importance for these students. Further, Espelage et al. (2016) proposed that social skill development leads to greater belongingness at school and fewer school-related problems. Therefore, setting social goals is a win-win situation for students, their families, and schools.

### Null Hypothesis 2 Discussion

Students who set goals for improved Academic Behavior showed significant academic growth on some benchmarking tests and did not show significant growth on other benchmarking tests. Students who set goals for behavioral improvement in the area of academics, showed statistically significant growth on their academic progress on the aMath and aReading benchmarking assessments, but did not show significant growth on all other assessments. From these results, the researcher concluded that students required further support with achieving their Academic Behavior goals and, in turn, furthering their academic progress. Benchmarking assessments where students did show statistically significant growth were based in basic skills, rather than critical thinking or application of skills. More targeted instruction, support with critical thinking skills, and strategies for improving academic behavior are all supports these students require.

#### **Research Question 2 Discussion**

How does student goal-setting for improved academic behavior affect academic achievement?

Students who set goals to improve their Academic Behavior demonstrated very little growth in their academic benchmarking scores overall. When students set goals for Academic Behavior, they had to state their goal, why they chose the goal, what they would do to improve the goal, and how they would know they had made progress.

Academic Behavior was the area which the fewest number of students chose to set goals in, indicating that not as many students were valuing the characteristics of Academic Behavior at the time of goal-setting or that students already rated themselves highly in this area. The low number of students who set goals in this area may relate to the COVID-19 pandemic and the prioritization of some skills over others for students to regain their sense of success at school and in life. Even though students set goals to improve their Academic Behavior, the reasons behind setting the goals were often emotional or social in nature. Student responses reflected students' desires to regulate their emotions. Table 15 displays examples of Academic Behavior goals students set, which reflected their interest in improving regulating emotions.

## Table 15

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
Female	Arguing	I want my brothers for we can get alone more.	stop arguing	Me and my brothers talking more.
Female	I wanna improve not getting in fights	because its not right and whenever it happened I did not feel like a good person.	first. I will stay away when the opponent is getting angry. Second I will try to help the person by finding an adult to calm the person down	When I stop getting into all the fights and drama and I'm not doing anything rude if someone hits me first
Female	I will try not to worry and think that something is going to happen	because I don't like	use the calm down space, using a calm down breathing, think happy thoughts	if I feel less worry

Examples of Academic Behavior Goals for Regulating Emotions

*Note.* These are examples of Academic Behavior goals set by n = 20 students.

Though not by a significant number, more males chose to set goals in the area of academic behavioral improvement than females, indicating that males may value

academic skills (noted in Table 6), and the academic success from improving those skills, more than female students do. Ratsameemonthon (2013) declared that academic achievement and academic self-efficacy are linked, which may be the reason why more female students did not set goals in academic behavioral improvement. If girls were already feeling more anxious and depressed, as a result of the disconnectedness they experienced during the pandemic, their self-esteem or self-efficacy for academic behaviors may have either been low or just not a priority. Asakereh and Yousofi (2018) found in their study that there were small correlations between academic self-efficacy, self-esteem, and academic achievement.

## Table 16

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
		1 <b>T</b> 1.	Don't look around the	because I wont have
Mala	academic	because I need to	class and focus on what	trouble finishing my
Wale	performance	minish my work	get good at academic	WOIK
Male	Academic	to get better at it	performance	by practicing
		0	1	because you can read
	to be more	because I no I can do	to get book in read the	and read to you get
Male	reading	it	book	better
Mala	independence	so I can learn now to	try hard	when I start doing it
Wale	macpenaence	I choose this area	i will go to more grades	more orten
	my goal is to	because I don't know	and pay attention in	when I'm getting higher
Female	learn more math	a lot of math	class	grades on math tests
	My goal Is to			
	do good at math			
	at math so I	Because The goal I	Recause The goal I	How I will know is if the
	want my goal to	want to have Is the one	want to have Is the one	did in my work if I did
Female	be good at math	I always wanted	I always wanted	good I well be so happy
			telling the teacher to	
<b>F</b> 1	learning more	because I don't know	give me more and	when I get better grades
Female	math	that much math	harder math	in math

## Examples of Academic Behavior Goals for Improving Academics

*Note.* These are examples of Academic Behavior goals set by n = 20 students.

Student responses reflected students' desires to improve their academics. Table 16 displays examples of Academic Behavior goals students set, which reflected their interest in improving academic areas.

In addition to academic factors, affective factors, like reflective thinking connect to academic success (Asakereh & Yousofi, 2018), so it may be that the experiences from the pandemic made those affective factors less accessible to some students. Ratsameemonthon (2013) observed that performance-approach goals connect to achievement. Students experienced less value placed on performance outcomes compared to completion or instant gratification and the skills to organize, prioritize, and learn from those processes, which teachers who taught online did not necessarily focus on. Student responses reflected students' desires to improve their attention, as well as other affective factors that play a part in learning. Table 17 displays examples of Academic Behavior goals students set, which reflected their interest in improving affective behaviors.

# Table 17

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
	Is to become	because I always		
Male	ready when it time to learn	have to ask what notebook are we in	stop not paying attention	when i stop asking what notebook are we in
Male	pay more attention.	because I pay	track the board and speaker	less reminders from teacher I will make a day board
Female	Attention	because sometimes I'm just not focused	put my art book away and listen to the teacher	to mark good days and bad days
Male	to pay attention in class and work hard	Because when your class and when tell you do something then do it	Because when you have a goal you to follow your goal	Because your behavior needs to improve to your teacher
		because I need to pay	Jour Bour	
Female	attention	more attention to what the teacher is teaching	think about what I can do	by pay attention
Female	attention	because when I'm hearing then I get things correct	I will do the right things and make my grands higher	making progress then I still keep going and going .
Male	To get Attention to almost always instead of often	I chose this area because I get distracted easily and the goal for the same reason.	1. I will stop talking to people around me when it's not time to talk. 2. I will try to be more interested in the subject we are learning about.	a lot more attention to the thing we are learning about in class. I would be raising my hand more often to answer questions.
Female	Resilience	I what to do that goal because it is some think that I what to do and get it of chest. to focus in my	To focus more and to pay attention more to do steps by step. first read more than one	Hmm, I'm not sure but I think that I will do write it down. I will now by my reading
Male	Engagement	reading	book	skills
Female	engaged in the learning	because it was low on the graph I feel bored being in class and want to	I don't know	I will know more academically
Female	get more academic interest I do not want	have a better interest for what I am learning	pay better attention to what my class is currently learning about	I will feel more interested when my class learns something new
	to do school	because I want to do		
Female	work.	my best	say on task	by likeing school more

# Examples of Academic Behavior Goals for Improving Affective Behaviors

*Note.* These are examples of Academic Behavior goals set by n = 20 students.

## Null Hypothesis 3 Discussion

Students who set goals for improved Emotional Behavior did not show significant academic growth on the benchmarking tests, save for on the aMath benchmarking assessment. In fact, the difference in means for three of the benchmarking tools was negative. This means that the students, on average, actually regressed in several areas (Math IXL Overall, Evaluate Math, and Evaluate Reading). From these results, the researcher concluded that setting goals for emotional behavioral improvements did not have a significantly positive impact on student academic achievement for all benchmarking assessments, except in the case of aMath.

### **Research Question 3 Discussion**

How does student goal-setting for improved emotional behavior increase academic achievement?

Students who set goals to improve their Emotional Behavior did not show an increase in their academic achievement, as measured by the benchmarks used. When students set goals for Emotional Behavior, they had to state what their goal was, why they chose the goal, what they would do to improve the goal, and how they would know they had made progress. In fact, there were negative mean differences in several areas, indicating that students, on average, showed a loss of learning. According to Séllei et al. (2021), the way a person handles stress affects their success in an academic setting. Student responses reflected students' stress related to academic content. Table 18 displays examples of Emotional Behavior goals students set, which reflected their stress related to academic content.

## Table 18

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
	to not make mistakes on	because I be making	not to forget what the	the person reaction or
Male	math	a lot of mistakes so I can be respectful	get a higher score on	if I ever get over 32 on
Female	respectful	to my score.	ELA.	ELA.
37 . 771	1		1 1 00 1	

Examples of Emotional Behavior Goals Reflecting Stress about Academic Content

*Note.* These are examples of Academic Behavior goals set by n = 20 students.

It is possible that students who were regularly in a state of emotional distress

chose this area in which to set their goals so they could more successfully tackle

academic challenges. Table 19 displays an example of an Emotional Behavior goal a

student set which reflected planning for paying attention.

## Table 19

Example of Emotional Behavior Goal Set for Paying Attention

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
Male	To pay more attention	I chose this goal because I really need to pay more attention so I can understand more stuff instead of having to ask what we are doing.	I will ignore distractions, Take notes in my notebook, and if I don't understand or need help I can just go back to my notebook.	I will be focused on the speaker/screen and at the end of a lesson I won't have to ask questions.

*Note.* These are examples of Emotional Behavior goals set by n = 24 students.

However, when in a consistently emotional state, the brain is not in a space to be able to take in and retain new information. Many of the students at the study site already experienced Adverse Childhood Experiences, sometimes in the form of poverty, food insecurity, or simply not getting the child developmental care to provide secure attachments (Leusse, 2016). According to Leusse (2016), when students do not securely attach to a caregiver at an early age, tolerance for stress is low, with difficulty applying rational thought for calming, little conscious thought in crisis situations, and an inability to sustain focus. If students are feeling emotionally dysregulated or that they do not have the support for re-regulation, then their focus is not on academic skill acquisition. Student responses reflected students' recognition of their emotional needs. Table 20 displays examples of Emotional Behavior goals students set which reflected their understanding of their emotional deficits.

### Table 20

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
Male	Withdraw	Because my teacher always say go play so when she tell me something, sometimes	play more often	not coming to the teacher that much at play time
Female	Withdrawal	I will do it in some time when I'm mad at her I will not do it	I will do what she tell me in if I'm mad at her I will do it	I will do what I am told to do
Female	Adaptable	Because sometimes we have a sub and I am not adaptable.	If it is the day before the day that we have a sub I will get ready. And breathe.	I will make a graph to see if I am reaching my goal. not getting emotional
Female	Emotional behavior	because I need to make sure to make sure my emotional is fine.	make sure to not get mad or sad for little things ?.	for some stuff or something that's not a big deal.

Example of Emotional Behavior Goals Set Reflecting Emotional Deficits

*Note.* These are examples of Emotional Behavior goals set by n = 24 students.

Their thinking is in disarray. In this study, a greater number of girls compared to boys set goals to improve their emotional behavior. This is likely due to the concerns of many girls in this age range (8–11) concerned about friendships, as well as many starting to feel the hormonal effects of puberty (Nemours Foundation, n.d.) combined with the

transitions of coming back from COVID and the looming thought of leaving the safety of elementary school. The COVID-19 pandemic has been a slow, collective traumatic experience for the students in this study, several of whom also endured the stress families from lower socioeconomic areas endure, due to exposure to abuse of different types. Grygarová et al. (2022) pointed out that ongoing "exposure to collective trauma" led to increased traumatization, not resilience (p. 9). Student responses reflected students' emotional turmoil. Table 21 displays examples of Emotional Behavior goals students set which reflected their desire to improve their sadness.

## Table 21

Exampl	les of	`Emotional	<b>Behavior</b>	Goals to	Improve	Sadness
--------	--------	------------	-----------------	----------	---------	---------

Gender	What is your goal?	Why did you choose this area and this goal?	What will you do to meet your behavior goal?	How will you know if you have made progress toward meeting your learning goal?
Female	Sadness	I chose this goal because when I am at school I always feel like I should be somewhere so I want to improve that.	I will try to make the best of it.	I will not want to be somewhere.
Female	sadness To work on my not	because it is something i need to work on!	1.I will only bring positivity in my life 2. good vibes only	i will use information cards everyday
Male	being sad.	Bc i am sad often	IDK talk to my mom or my	No
Female	sadness	almost always Because i want to get	stepdad or my uncle or my aunt	sad if i feel like my tears
Male	sadness	not be so emotional	breaths	breathing
	My goal is	I Choose This goal	stuff and people that make me sad. I could also try thinking of	I wont be sad anymore. I will have happier
Male	sadness	Because 1 am sad alot	happy things.	thoughts.

*Note.* These are examples of Emotional Behavior goals set by n = 24 students.

When students were back with peers, schools and educators expected them to remember what to do. That immediate adjustment was difficult, as it takes time to readjust to what was while all the time they were growing and their brains were developing. Student responses reflected students' anger and worry. Table 22 displays examples of Emotional Behavior goals students set which reflected their desire to improve their anger and worry.

# Table 22

		Why did you choose	What will you do	How will you know if you have made progress
Gender	What is your	this area and this	to meet your behavior goal?	toward meeting
Male	temper	because I get to mad sometimes	if I get angry I will take a deep breath deep breaths and	I was handling my temper really good today
Female	control my anger	cuz I need help in it	the problem I can talk to the person I'm arguing with and	I will ask people
Male	arguing	I don't want to argue so much because I might get in trouble.	if that does not work I can walk away. ask for calm down	I will not start to argue at random times.
Female	worry less	I'm always worrying that someone will throw something at me.	space, ask for a seat change, take a break in another room	If I ask for the calm down space
Female	bc when I get in trouble I worry about a lot of things I worry much because I feel like when a	I can try to come myself done in not start to cry	go to the calm down space, use a calm down strategy,	when like I am not getting in trouble, because I don't worry if I am not in trouble
Female	friend gets mad I worry because I think hes going to throw something at me at me	I choose this goal because I need to stop worrying so much.	1 I will know he needs attention 2 I know he gets mad because someone did some thing to him.	I know because when someone does it to me i know what it feels like.

Examples of Emotional Behavior Goals to Improve Anger and Worry

Female	Worry	Because I want to be good at not being worry .	If I'm worried I can take a deep breath and calm done` think of something else, play with a friend,	because if something happens I wont be worried
Female	worry	because I need to work on not being worried because I do not	maybe take a walk, take a nap, make art,	If I don´t worry about anything
Female	to not anxious	want to be anxious in school or in general	I can think about things that don't make me anxious	I will not be as anxious
Female	worried	time	and in so use calming down and draw	no more
	to not be so	because I have a lot	music, to stop and	I would be less sad
	time I get	because mostly I do	and control my	are worried, start
Female	of things	over things	sadness	not cry all the time

*Note.* These are examples of Emotional Behavior goals set by n = 24 students.

Séllei et al. (2021) affirmed in their research that being aware of one's emotions, as well as having control over them, has a powerful impact on academic progress, which indicates the importance of the development of emotional skills.

### **Null Hypothesis 4 Discussion**

Students who set goals for improved behavior showed significant academic growth on all benchmarking tests, except for Evaluate Math and Evaluate Reading. Students who did not follow the study-prescribed goal-setting process also showed significant academic growth on all benchmarking assessments, except for Evaluate Math. Math Overall IXL for the control group resulted in a mean difference close to 18%, while the Reading Overall IXL for both groups resulted in a mean difference close to 23% for the goal-setting group and close to 20% for the control group. All three of these are close to the expected growth on IXL for the given time period of 23%. This means that the students, on average, actually showed progress on The IXL Diagnostic benchmarking tool for the approximate amount expected for the time period of the study. In comparison with one another in a *t*-test of independent means, aMath was the only benchmarking assessment in which statistical significance was found between those students that followed the prescribed process to set goals and those that followed their classroom goalsetting process. From these results, it can be concluded that, for most of the benchmarking assessments, setting goals for behavioral improvements does not have a significantly positive impact on student academic achievement.

#### **Research Question 4 Discussion**

How does student goal-setting for improved behavior affect academic achievement?

Students who set goals to improve their behavior did not show an increase in their academic achievement, as measured by the benchmarks used. In comparison, those students who did not set goals to improve their behavior also did not show a significant increase in their academic achievement.

Therefore, the results would indicate that goal-setting has no impact on academic achievement in a short-term (8-week) study. Having this study extend longer, potentially the length of a year, with scripted adult support, could have changed the outcome of the results. Moeller et al. (2012) declared that systematic goal-setting leads to a greater ability to set goals, with a potential result of improvement in academic performance over time. Latham and Locke (2007) posited that with goal progress comes increased feelings of capability in improving skills. Despite the work students put in to set goals to improve

their behavior and, potentially, their academic progress during this short study, their hard work was not always obvious in their academic achievement results.

### Themes

Though academic achievement results did not increase by a greater amount due to students setting goals to improve behavior, themes did emerge from the data. The types of goals set and results from academic benchmarking revealed that the reach of the COVID-19 pandemic had a negative impact on social, emotional, and academic progress. The study results and goals set also revealed gender differences, the need for continued SEL, and increased student agency to support students.

### Lasting Effects of COVID-19

Grygarová et al. (2022) declared that, "As the global COVID-19 pandemic has gradually evolved since its inception early in 2020, it has been increasingly apparent that it constitutes not only an unprecedented epidemiological and medical emergency but also a major psychological, social, and political problem" (p. 2). As the COVID-19 pandemic led to a disruption to daily life, including socialization, hobbies, and sports (Guazzini et al., 2022), so too did the pandemic lead to educational interruption, a lack of social skills practice, and collective traumatic experiences associated with the loss of these freedoms, but also the ever-present unknown of how the pandemic could continue to impact our world (Tortella et al., 2021). As communities put in place strategies to support safety, such as distancing, lockdowns, and closures, the result was an additional stress response in the brain leading to changes in brain processes not conducive, and in fact, blocking new learning (Leusse, 2016). Tortella et al. (2021) agreed, finding that conditions where people were connecting remotely led to a higher likelihood of psychological distress and

negative effects that come along with that distress. Further, the stressors from the unknown and the known, but unpredictable, can negatively impact both learning and retention (Tortella et al., 2021). The result was an increase in loneliness, stress, anxiety, mental illness, and depression for all (Guazzini et al., 2022). However, Tortella et al. (2021) differentiated that younger people have reported even greater amounts of generalized anxiety disorder and depression. Guazzini et al. (2022) also found an increase in behaviors that indicate technology addiction in young people. All of the distress mentioned affected the students in this study and, in turn, their ability to make incremental changes in their behavioral and academic progress. Additionally, on top of the collective traumas associated with the COVID-19 pandemic, many individuals in this study (and around the world) experienced the trauma associated with poverty. For how can academics ever really be the focus without society meeting the basic needs of children?

### Potential for Gender Differences in Goal Focus Area

Though the basic needs of humans are the same, males and females, even children, differ on what they choose to focus their attention. During the COVID-19 pandemic, Grygarová et al. (2022) found that younger demographics, particularly young women, had higher levels of anxiety and depression. According to Guazzini et al. (2022), before and during the pandemic, girls reported being lonelier and this increased during the pandemic, while boys reported a greater sense of community found in their virtual classes. The Centers for Disease Control (2023) also found that male students had a greater likelihood of feeling connected to someone at school than female students (p. 74), while female students increasingly have felt more hopeless and sadder. Additionally, girls

relied on technology more to communicate with both family and friends during the pandemic (Guazzini et al., 2022). Young women increased in social media use across the board, while young men tended to stick to gaming platforms or those with specific interests or activities in mind (Guazzini et al., 2022). Despite this, an increase in anxiety and depression was shown for all people (Guazzini et al., 2022). Because of these differences in how the pandemic affected genders and their natural proclivities even before the pandemic, it was no surprise that students in this study chose different goal areas. Female students were much more likely to set goals in the area of Emotional Behavior, while male students more commonly set goals for improvement in the area of Academic Behavior. An equal number of students chose to improve their Social Behaviors, which indicates that, despite gender, students know there is a need for improvement in the area of interactions with others. Upon completion of the study and analysis of the students' goals, results indicated gender potentially played a role in the reactions students were having in relations to the COVID-19 pandemic. Because of the results, future research related to student goals around behavior and the COVID-19 pandemic could indicate how to best support students of different genders.

### Social-Emotional Learning

Based on student and teacher willingness to participate in this study, as well as research done thus far on the effects of the COVID-19 pandemic (Grygarová et al., 2022; Guazzini et al., 2022; Tortella et al., 2021), it is obvious that SEL is necessary to support the success of the people affected in moving through the pandemic, and also in having the skills needed to be successful throughout their lives. Social-emotional skills have to be taught and learned just like any other information. According to Tortella et al. (2021),

"learning is the acquisition of new knowledge" and, in this case, that knowledge could potentially support lifelong success. CASEL (n.d.) declared that the application of SEL skills could help anyone achieve goals, support good decision-making, and successfully manage their lives (CASEL, n.d.). Social-emotional skills can include mindfulness, selfawareness, and self-control. Tortella et al. (2021) defined mindfulness as focusing attention to one's self through breathing and senses. Focus on self can decrease anxiety, increase memory, and potentially change the connective structures in the brain to support learning and regulation processes (Tortella et al., 2021). Early instruction in SEL basics, with support for generalization, as well as appropriate intervention for individual success, may make a great difference in the future success of children, as they have been found to limit risky behaviors (Durlak et al., 2011; Espelage et al., 2016; Lawlor et al., 2014). For the aforementioned reasons, as well as the needs of the students in this study, there should be more focus on instruction and support for SEL for all students to make improvements. In addition, stakeholder support for implementation of protective factors that influence learning and concentration, such as good sleep, physical activity, mindfulness, and healthy food are paramount (Tortella et al., 2021). The students in this study were not able to put protective factors in place on their own.

### Supporting Student Agency

Though students may have set goals and know that they can impact their behavior and academics, they often do not have the skills to be able to follow through on those goals or the knowledge to be able to know what to do. The goal of SEL programs should be to help students develop necessary skills, so they can be equipped to put whatever skills different situations call for into place as they are needed, with decreasing help from adults as students age. Educators should provide substance for support, such as giving choices or responsive skill instruction, because students may want to improve, but most do not know how. Due to the timing and the nature of the study, it became obvious that students did not have the skills or the know-how to help improve their behavior, even with goal-setting. Their confidence and self-efficacy related to social and emotional know-how seemed to be behind where it should be for their age, despite skills lessons. Guazzini et al. (2022) determined that virtual learning resulted in feelings of isolation. Remote education also required significant self-discipline (Guazzini et al., 2022). The requirement of more independent work, with the potential for disturbances in the domestic arena resulted in students not feeling they have agency to make progress for themselves. Students need this agency, whether setting goals or in their instruction, to develop safety and confidence in order to lead to a greater likelihood of academic success (Richardson, 2017).

#### **Reflection on the Study Design**

After the study concluded, it became apparent that certain limitations affected the results. These limitations included teacher perceptions about the study, aspects of the goal-setting model, and timing limitations, as well as the variety of instructional and behavioral fluctuations that are present in classrooms. The first limitation concerned teacher mindset. Teachers who were having difficulty with students opted to participate, thinking this would solve their behavior concerns, even after being presented that the premise of the study was to see the impact on academic achievement. This mindset led to teachers not necessarily letting the students drive the accountability, as well as potential data collector bias. Fraenkel et al. (2023) defined data collector bias as "unintentional

bias on the part of data collectors that may create a threat to the internal validity of a study" (p. G-2). Despite the procedures being clearly laid out for how teachers would implement students' goal-setting and how the weekly check-ins should take place, teachers knew their students and had the ability to direct them during the proceedings.

The next limitation related to the particular goal-setting model that was used in the study. There are several aspects of the goal-setting model that may have impacted the results of the study. Though limitation concerns existed about monitoring fidelity to a scripted process for feedback and support, other researchers have noted how important that feedback is to student success in reaching their goals (Dotson, 2016; Frey et al., 2018; MWCC, 2018). Therefore, a script for how teachers could provide support and feedback to students may have made a difference in the study results. In addition, requiring that goals have specific, measurable outcomes with timelines and action steps, as suggested by Rowe et al. (2017), may have supported more consistent results. Based on teacher feedback, it seems that teachers may not have had fidelity to the process. Consequently, student reflection and goal-setting to make a change in their chosen behavior, which was supposed to increase their agency and accountability in their learning, was not necessarily happening in a timely manner. Adjusting the study in specific ways to require better fidelity, perhaps as part of the instructional process, may have addressed these limitations.

The timing of the study was an additional limitation that had some impact on the results. During the study there were several events that impacted the mortality of the results, including WIDA Access testing for students who are English Learners, Spring Break, and lack of attendance, due to sickness and other factors. Fraenkel et al. (2023)

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defined mortality as the loss of subjects. Though the researcher excluded some data for specific benchmarking sets, due to partial mortality, this exclusion did not affect the included overall mean differences in the data. This potentially limits generalizability and can introduce bias, depending on the difference in responses between those who were lost and those who stayed in the study the entire time. Additionally, there was learning loss and learning strategy loss from COVID, as students missed important information, which impacted their readiness to learn after a traumatic event and, in turn, impacted academic achievement (Mervosh, 2022).

Other limitations included variety in the quality of instruction received, including fidelity to curriculum and standards to be taught, behavioral interruptions or student physiological factors (Ryan, 1970), and teachers' abilities to manage classrooms in order to continue to deliver instruction, as well as teacher attitudes. The school year in which the study took place was a particularly difficult year, as the students and staff returned from hybrid-style or virtual learning and were grappling with social, emotional, and behavioral difficulties that they may have not seen previously.

In terms of external validity, there was a limitation to how the information learned from the results of this study could be applied in other settings. The level of transiency and poverty at the school may make it difficult to generalize results to the whole population of intermediate students. However, as noted in Chapter Three, the results of this study do apply to settings that are resource-poor. The transiency rate for the 2021– 2022 school year at the study site was 15.4%. Further, all students at the school received free breakfast and lunch. The sample demographic information closely corresponds to the demographic information that often occurs in lower-socioeconomic schools, as designated by the number of students who receive a free or reduced-price lunch (National Center for Education Statistics, 2022a). The racial/ethnic makeup of the study site was also similar to lower-socioeconomic schools, whose demographics are approximately 8% White students, 45% Black students, 43% Hispanic students, and 17% multi-racial students (National Center for Education Statistics, 2022a, para. 2). With similar demographics to the school in the study (see Table 2), this sample is representative of a student population in need of educational support, so that all students receive a quality education (Kober et al., 2020). Based on the results of the study, the researcher has recommendations for the study site, for programming related to student goal-setting for improved behavior, and for further study.

#### **Recommendations for Programming and the Study Site**

Based on the results of the study, there are several recommendations the researcher has for the site, including programming suggestions. According to the Midwest Comprehensive Center (MWCC, 2018), goal-setting helps develop agency, motivation, and organization of learning for students. Because of this effect, it is a recommendation that student goal-setting for improved learner behaviors continue at the study site. However, the process needs to include more teacher support with check-ins and, potentially, a script for teacher support with goals. CASEL (n.d.) observed that there are five connected areas in which people should build skills to be successful in managing their lives. These include building self-awareness, self-management, social awareness, developing their relationship skills, and helping them make responsible decisions, with the goal that those learning these skills would be able to connect them to their lives and improve their communities (CASEL, n.d.). Additionally, different types of learning

strategies, including strategies related to management, motivation, meta-cognition, and cognitive strategies, should be taught to students (Frey et al., 2018). These skills will help students with task initiation, will build up their confidence and help them learn to advocate for themselves and others. To execute this plan, an extended length of time is needed for goal-setting for improved behavior, with action steps and support choices for students to feel they have tools at their disposal to make change in their behavior. However, the outcome will be worth it. As Frey et al. (2018) declared, "Academic selfefficacy is an important factor in self-regulation" (p. 53). As students feel better about themselves, their willingness to take academic risks will increase. As the study site has a population of English Learners, a notable by-product of the implementation to improve affective factors, like reflective thinking, self-efficacy, and self-esteem, could be greater academic success of students for whom English is a foreign language (Asakereh & Yousofi, 2018). Instruction has to be targeted and prioritized, both in SEL and academic skills. Students will require help making the connection between behavioral improvement and academic success, and the support different genders need may be different. Peer support for behavioral improvement, with mentors could potentially make a difference for behavior that could influence academic progress. In order to do this at the study site, educators should engage the community and families in the goal-setting process, rather than just the students. A greater likelihood of success is the hope of community and family engagement.

#### **Recommendations for Future Research**

Beyond the recommendations for the study site, there are some recommendations for future research. According to MWCC (2018) successful outcomes depend upon the

goal-setting design and how it is implemented. To be successful, the goal-setting design has to include support, potentially through group or individual conferring, and be part of the student's individual learning plan (MWCC, 2018). Because of these recommendations, further study is needed in goal-setting for improved learning behaviors. In addition, the study should be done over a longer period of time with more prescribed adult support along the way. Inclusion of a student self-assessment component of behavioral supports could also allow support that is more responsive. Further, future study should include more students during a time of year that everyone can participate, potentially all year long. To target growth, future studies should focus to improve one specific goal area (Social, Emotional or Academic). Goal-setting has the potential to lead to greater success for students because it develops their self-awareness and increases their accountability (Sides & Cuevas, 2020). Further research is needed in this area to determine how setting goals for improvement can lead to greater academic success. As Sides and Cuevas (2020) declared, there is a positive relationship between setting high goals and academic performance, and it is up to educators to find that connection.

#### Conclusion

Changes in the world we live in demand a change in the way that educators support students in their personal and academic growth. Building agency and accountability in children now gives them a foundation to be independent adults who advocate for themselves and have the ability to set and adjust goals for success. CASEL's (n.d.) framework of skills, which several programs reference and are based upon, aim to help people build the skills they need to manage their lives successfully. Though students setting goals to improve their behavior did not support significant academic growth in this study, it does not mean there is no value in helping students see the agency they have to control their lives. To make real change, educators can focus on SEL skill acquisition, especially self-control. In addition, they must help students build self-efficacy and agency around their ability to adapt. Bandura (1997) posited that people can shape, organize, and guide their lives and the systems in which they exist. This idea, coupled with intentionality and goal-setting can make a behavior more likely to occur (Ryan, 1970). Our world is filled with so many things that are out of our control. Teaching children that they have some control over their lives and the actions they take could be the first step toward helping them become adults who can make the world better than it is today.

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### Vitae

### **Meghan McNulty**

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## PROFILE

- Educator with approximately 20 years of experience
- Excels in collaborative problem solving based around data driven decisions
- Creates relationships with students and colleagues built on trust and respect

## **EDUCATION**

Lindenwood University: Doctorate in Instructional LeadershipAnticipated May 2023Lindenwood University: Ed. Spec.: Initial Principal CertificationAug. 2015Washington University: Adv. Cert. Inquiry in Science EducationMay 2013Webster University: Masters of Arts in Teaching Spec. Educ.: InclusionDec. 2007University of Missouri - Saint Louis: Bachelor of Science in Elem. Ed.May 2003

# CERTIFICATIONS

Principal (k-8) Principal (7-12) Elementary Education (1-6) Early Childhood Education (birth-3) Library/Media Specialist (k-12)

# **RELEVANT LEADERSHIP EXPERIENCES**

Principal, Ritenour School District

August 2021-Present

- Engage stakeholders in caring conversations to foster genuine relationships
- Collaboratively make decisions regarding school-wide systems and needs
- Develop school-wide commitments, with actionable steps and evidence of progress
- Participate in instructional inquiry during Data Teams and PLC Meetings
- Facilitate professional development on research-based practices
- Coach teachers using a Performance-Based Teacher Evaluation tool
- Support students to learn critical thinking, problem solving and advocacy techniques
- Problem solve in collaboration for academic and behavioral supports
- Celebrate successes and milestones with recognition and gratitude
- Create a School House system to support community and belonging for students
- Manage the safety, facilities, budget, and human resources aspects of a school

## Assistant Principal, Ritenour School District

- Lead school-wide assessment endeavors and assist teachers with facilitation
- Develop school-wide improvement plan, monthly deliverables, assist in presenting
- Review and revise processes related to school-wide tiered intervention systems

August 2016-July 2021

### Administrative Internship Hours, Ritenour SD

- Analyze achievement data to identify professional development needs
- Collaborate with administration to develop professional develop plan
- Facilitate professional development experiences at the school and district level
- Observe use of professional learning and facilitate reflection and feedback
- Develop and implement plans for student and staff recognition
- Evaluate science curriculum for unaddressed standards, align online curriculum
- Coordinate 4th Grade Jefferson City trip: budget, transportation, and communication

# *MySci Curriculum Consultant*, Inst. for School Partnership 2014-2016

- Analyze curriculum and collaborate to develop inquiry and standards-based lessons
- Creatively problem solve budget concerns related to curriculum kits

## **PROFESSIONAL LEARNING AND ACTIVITIES**

-	Performance-Based Teacher Evaluation Committee	June 2022-Present
-	Cognitive Coaching	Spring 2023
-	Ritenour SD Competency-Based Learning Committee	Fall 2017-Present
-	Ritenour Competency-Based Summit	June 2022
-	Innovative Schools Conference: Atlanta	July 2022
-	Admin. Guide to Restorative Practices: St. Louis	November 2019
-	Presenter: The Polarities of Coaching and Accountability	October 2019
-	Competency Based Schools Summit: Westminster, CO	October 2019
-	The SIOP National Conference: Portland, OR	July 2019
-	NCTM: Regional Conference: Seattle, WA	November 2018
-	PESI Self-Regulation	June 2018
-	Trauma-Informed Schools Conference	June 2017
-	Trauma-Informed Symposium	April 2017
-	Presenter: Assessment for Learning Training, Ritenour SD	2015-2016
-	Close Reading: Text-Dependent Questions	December 2015
-	Presenter: Interface Conference for Science and Math	Winter 2015
-	Project Lead the Way Robotics and Automation Training	Fall 2014
-	Presenter: NSTA Conference - Boston, MA	April 2014
-	Presenter: Science Teachers of Missouri - Columbia, MO	September 2013
-	Presenter: Water's Foundation Systems Thinking in Schools	June 2013
TEACHING EXPERIENCE		
Ritenour School District		
Ge	neral Education Teacher, 4th and 5th Grade Science Teacher	2004-2016
PL	TW: Robotics and Automation, Stability and Motion	2015-2016
H	DNORS	
-	Presented PLTW to Governor Jay Nixon	January 2015
-	PAEMST State Finalist	2013-2014
-	Marion Elementary Diamond Circle Teacher of the Year	2013-2014
-	Emerson Excellence in Education Nominee	2011

- Marvin Elementary Diamond Circle Teacher of the Year 2008-2009

January 2014-June 2015