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Building Teacher Differentiation Self-Efficacy in the Classroom

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Building Teacher Differentiation Self-Efficacy in the Classroom

Tyler Krattenmaker

Capstone Project: A School Improvement Plan

Northwestern College, Orange City, Iowa

Abstract

The practice of inclusion has allowed more students with disabilities to participate with their peers in general education classrooms than ever before. However, research findings show that in many cases, educators have low self-efficacy when it comes to their ability to serve students with disabilities within their classrooms. Studies have documented a need for professional development to target inclusion and accommodations, showing that increased training increases teacher self-efficacy in implementing students supports. With this research in mind, a school improvement plan was developed that focuses on a professional development series to increase educator self-efficacy in implementing accommodations frequently included in the IEPs of students at the targeted campus. This school improvement plan provides a framework for gaining educator feedback on the most frequent accommodations in their building, creating, and executing professional development to target accommodations that have low self-efficacy within the building, and monitoring efficacy growth among staff.

Keywords: special education, inclusion, self-efficacy, professional development, differentiation, accommodations

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Building Teacher Differentiation Self-Efficacy in the Classroom

The practice of educational inclusion strives to ensure that all students are provided access to a high-quality education within the general education setting. In recent decades, the amount of time that students with disabilities (SWD) are spending more than 80% of their time in the general education classroom has nearly doubled, jumping from approximately one-third of SWD to two-thirds (Blazer,2017). For SWD, inclusion is most often implemented through accommodations, modifications, and supports to allow access to grade-level standards and content that is comparable to their general education peers.

The push for inclusionary practices has been accompanied by an increased need for teachers to understand and support varying levels of educational need within their classroom. The problem, however, is that educators do not feel prepared to support SWD effectively within their classrooms. Teachers all over the world are identifying an increasing need for pre-service inclusion training. Of nations who participated in the 2018 Teaching and Learning International Survey (TALIS), 25% of teachers indicated a need for increased professional development to support SWD, with even higher numbers in countries such as Brazil and Mexico (Kubacka & D’Addio, 2020). Thus, despite literature to support the benefits of inclusion, teachers are often lacking the self-efficacy to support SWD within their classrooms through inclusion. Wright and Meyer (2017) refer to Bandura (1997) when contemplating the role of self-efficacy in inclusionary practices such as accommodations, stating that “a lack of instructor self-efficacy may help explain instructors’ uncertainty in being able to effectively provide accommodations. . . . Instructors with significant instructional self-efficacy tend to identify all students as being teachable through appropriate techniques, and these instructors spend more time helping.” Belief in one’s own abilities can be a driving force in the quality or willingness of overall

implementation of supports, which are desperately needed for SWD to adequately access general education in an inclusion-based setting.

The purpose of this school improvement plan is to increase teacher self-efficacy in implementing accommodations within the general education setting, with a secondary desire to decrease the achievement gap between SWD and their non-disabled peers in mathematics and reading. Through the implementation of school-based professional development that is based on school-specific teacher survey data, teachers' accommodation self-efficacy will increase, leading to decreased performance gaps for SWD on diagnostic assessments. In a world where teachers often lack resources or adequate professional development, the hope of this project is to provide school-based professional development that is grounded in both the needs of teachers and the student population that they serve. By increasing teacher self-efficacy, teachers are more empowered to engage in organizing, planning, and delivery of lessons that involve more challenging instructional strategies (Chao et al., 2017).

Sources informing this school improvement plan were accessed through the DeWitt Library at Northwestern College in Orange City, IA, along with Google Scholar, ERIC, SAGE, and ResearchGate. Studies ranged from international data to state-based research in the areas of inclusion, teacher self-efficacy, and professional development. Studies reviewed on the development of teachers when serving students in special education or instances in which inclusion demonstrated benefit to SWD were published in the last 15 years. Keywords included professional development, inclusion, self-efficacy, collaboration, pre-service training, and accommodations. Thirty-six sources were selected based on foundational relevance to self-efficacy, the benefits of inclusionary practices, and benefits of teacher professional development.

Studies were used to build understanding of existing research, recognize gaps in research, and assist in the development of the school improvement plan.

When teachers are provided meaningful professional development in the realm of differentiation, their self-efficacy regarding their ability to serve SWD inside general education increases (Dixon et al., 2014). In the case of this school improvement project, if targeted differentiation-based professional development is provided to staff in the fall of 2022, both teacher efficacy in differentiating/providing specific accommodations within the classroom and student growth for SWD should increase. Teachers will initially complete a self-efficacy survey. After analysis, five accommodations or supports will be selected and featured in professional development in the fall of 2022.

The following literature review explores the connections between inclusive education and the self-efficacy of teachers. In the area of inclusive education, the literature review will explore special education legislation, performance of SWD, types of supports students can benefit from in general education, and the attitudes and perspectives of teachers. Additionally, general research on self-efficacy will investigate the connections between self-efficacy, professional development, collaboration between teachers, and attitudes of teachers towards inclusion.

Review of the Literature

Inclusion

The roots of inclusionary practices in education stem back to foundational special education legislation, more specifically, PL 94-142 (1975), which initiated the ideal that all students with disabilities (SWD) should be provided with an education equivalent to their nondisabled peers. This act has been followed by multiple reauthorizations, including the Individuals with Disabilities Act (IDEA) (2004), No Child Left Behind (NCLB) (2004), and Every Student Succeeds Act (ESSA) (2015), each legislation further defining what educational

“access” means and looks like for SWD. More specifically, the terminology of providing students with a Free and Appropriate Education (FAPE) has been developed through legislation with the intent of providing students with what is defined as their least restrictive environment (LRE). IDEA (2004) defines a student’s LRE as follows:

To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

As time progressed, the term “access” has been redefined by legislation to not only ensure that SWD have access to their LRE, but also hold schools accountable in ensuring that SWD have sufficient academic outcomes through academic testing (Williamson et al., 2020). The implication of this movement is that to the greatest extent possible, students who receive special education services are included in general education alongside their peers as much as is appropriately possible. At annual and tri-annual Individualized Education Program (IEP) reviews, IEP teams are required to determine to what degree a child will participate in general education, naming one of three designations: 80% or more participation in general education, 50-79% participation in general education, or 0-49% participation in general education.

The push for increasing both educational outcomes and overall access to general education opportunities for SWD has led to the development of inclusion, which is the idea of serving SWD within the general education classroom with appropriate accommodations and modifications that support their access to grade-level standards. Inclusion is guided by the

concept of FAPE, pushing general and special educators to determine what the appropriate setting is for a student identified with a learning disability. These acts of Congress appear to have had influence. The U.S. Department of Education (ED) (2022) reports a more than 50% increase of SWD disabilities who spend 80% or more of their time within the general education setting since 1989. SWD have moved from roughly 30% of the population being educated in general education 80% or more of the time to roughly 65% of the population in 2020. Teachers have an increased legal and moral responsibility to differentiate classroom materials and instruction to meet the needs of the exceptional learners within their classroom. With this increased responsibility comes an increased need for collaboration with special education teachers, a need for additional planning time, and an increased need for professional development to equip teachers to implement a high level of differentiation for SWD.

Within the framework of inclusion lies the practice of differentiation, which refers to the adaptation of instruction to meet the needs of students within the general education classroom. Differentiation manifests itself in how content is presented to a student, how the student can communicate their comprehension or proficiency in material, and/or how students are engaging with material to process the content (Dixon et al., 2014). The cornerstone of differentiation is that teachers are being responsive to the individual needs of students so that students can best access and engage with academic material within the general education classroom.

Researchers are finding that teachers are mostly willing to provide accommodations within the classroom to students with disabilities (Hawpe, 2013). However, research in teacher attitudes and perceptions of inclusion find that many teachers do not feel prepared to teach SWD within the general education classroom, thus perpetuating a negative attitude towards the instructional practice due to the increased stress that accompanies the increase in planning and

the lack of confidence to support the vast number of needs within a classroom without additional support (Gaines & Barnes, 2017 as cited in Alahbabi, 2009; Hwang & Evans, 2011; Itkonen, 2007; Odom, Buysse, & Soukakou, 2011; Wah, 2010). Along the same lines, researchers have also found that teachers have a low sense of self-efficacy when it comes to their ability to teach SWD. Although they have a belief that SWD should be educated in general education, educators have overall concerns with their ability to meet the needs of all their students due to lack of support and the high level of demand placed on teachers due to inclusion. As Costley (2013) asserts, an unfortunate result of these feelings by teachers is that whereas SWD are placed in general education, they often do not receive the supports and accommodations outlined in their IEP that would allow them to be successful in that setting due to teachers not having the self-efficacy, resources, or knowledge to implement them. Most teachers desire stronger levels of professional development to support their development in endeavors to teach SWD in the general education classroom (Everling, 2013).

Cole et al. (2021) notes that historical research on the impact of inclusion is inconclusive due to the lack of research exploring the connection between inclusion and academic outcomes. There has yet to be studies that analyze the overall relationship because LRE placements are determined by an IEP team and are not at random. Research is thus restricted as there cannot be random assignment to inclusion or non-inclusion educational settings, making effective research design more challenging. However, despite a scarceness of research, Cole et al. (2021, as cited in Zigmond, 2015), acknowledges studies that note either a mixed or negative outcome for SWD when they participate in inclusion-based programs (Dyson et al., 2004; Kalambouka et al., 2007; Rogers and Thiery, 2003). More recent studies reviewed by Cole et al. (2021) found academic benefits for SWD who are included within general education settings. These studies (Tremblay,

2013; Theobald et al., 2019; Lombardi et al., 2013) demonstrate that SWD who participate in general education 80% or more of the time experience greater academic success and more positive post-secondary outcomes compared to peers who participate in self-contained education settings. Additionally, Choi et al. (2020) found that when inclusive education models, such as the Schoolwide Application Model, are implemented with fidelity, outcomes for SWD were positively affected.

In summary, more recent studies have found benefits to inclusion within the general education setting for SWD than previous studies completed at the start of the inclusion era. The current challenge lies within the support provided to general education staff—professional development impacting their personal self-efficacy in their ability to support and educate SWD within their classrooms.

Achievement of Students with Disabilities—The Gap

SWD are identified through extensive educational testing and an IEP team decision. Data gathered throughout the special education evaluation process must demonstrate that a student is performing at least two standard deviations behind same-age peers. This designation translates into a student being multiple grade levels behind their peers in skills that are critical to accessing general education without support. Students identified to have such educational gaps to succeed in general education and make continued growth qualify for special education services to support closing the identified gaps. Using the framework of inclusion, such support services do not require that a student needs to be in a separate classroom or self-contained program in most cases (unless it is determined that they need such a setting through their IEP). Rather, students can participate with their peers in general education with targeted instruction or supports (accommodations and modifications) that allow them to both close the gaps in academic skills

and not feel singled out from general education peers. However, for inclusion to work and for students to access general education content that may be challenging due to their educational gaps, students must be provided the accommodations and modifications that are outlined by the IEP. Not receiving these services consistently could impact their overall performance, confidence, and ability to close academic gaps.

Nationally, SWD consistently perform below their non-disabled peers on a wide variety of testing measures. In 2018, Gilmour, Fuchs, & Wehby completed a meta-analysis of the reading achievement gap between SWD and students without, in which they differentiated between the pre- and post-NCLB era. After looking at 23 studies that were completed both pre- and post-NCLB, researchers found that SWD were still performing three or more years below that of their same age peers, concluding that there remains a gap in the access that SWD have to instruction needed for success. Similarly, Schulte and Stevens (2015) completed a longitudinal study of the achievement gap in North Carolina and found that regardless of the different ways they could define the SWD subgroup per NCLB guidelines, SWD had a substantial gap in achievement when compared to their non-disabled peers, in addition to slower rates of growth. These data points are indicators that SWD are often a subcategory of learners that need increased support to make their targeted academic outcomes.

In a review of more recent data provided by the U.S. ED, Rhodes (2022) concludes that SWD still experience a gap in achievement. In the Department of Education's 43rd annual report to Congress on the implementation of IDEA, Rhodes (2022) provides data showing that SWD in grades three through eight and high school in the median percentile served under IDEA ranged in proficiency from 7.3-24.4% in mathematics and 13-18% in reading. It is observed that more students score at the proficient level in the younger grades, with a general decline in proficiency

as students reach the high school level. Additionally, the National Center for Education Statistics (n.d.) provides data showing that nationally, as of 2019, SWD experienced a score gap ranging 30-47 points behind their non-disabled peers in reading and mathematics. As SWD continue to move through each grade level, if their skill gaps are not addressed in a way that allows them to grow more than their average peer each year, the gap will continue to widen.

As the achievement gap widens, SWD are less likely to perform at what would be grade-level proficiency due to their level of skill gap. Consequently, it is increasingly difficult for SWD to access general education content. For example, if a secondary level student has a third grade reading level, they are just on the brink of using reading as a learning tool rather than learning to read. They would not be able to access grade-level support without differentiation of materials. Therefore, if a teacher does not adhere to the accommodations or supports outlined in the IEP, a student will not be able to equitably participate in the classroom, affecting their performance, confidence, and attitudes towards school. However, if a student does receive the outlined supports within their IEP in the general education classroom in addition to the targeted instruction, a student can participate at grade-level while receiving the supports that are necessary to increase their reading level.

Although there is observable data as to the benefits of inclusion and the performance gap that is experienced by SWD, there is still a gap for teachers in terms of their self-efficacy in the actual implementation of inclusion and differentiation. Increasing the capacity, expertise, and confidence of teachers is necessary to ensure that educators have the necessary tools, skills, and resources to adequately support SWD inside the general education classroom, increasing positive achievement and growth outcomes for SWD.

Self-Efficacy

As cited in Chao et al. (2017), Bandura's theory of self-efficacy (1997) pertains to a person's belief in their ability to organize and execute a course of action in order to reach desired outcomes. The more highly one views their skills and abilities, the more likely they are to produce a desirable outcome, whereas a low sense of self-efficacy is related to feelings of helplessness or anxiety.

When this theory is applied to both education and inclusion, the self-efficacy of teachers refers to their level of confidence in their ability to sufficiently serve SWD and how their belief about their own abilities affects their performance and student achievement. A teacher who has high levels of self-efficacy would be more likely to try new instructional strategies, overcome challenges such as lack of resources and support, and put more effort into the planning and design of lessons to increase the achievement of all learners within their classroom. Teachers who have high levels of self-efficacy are found to embrace inclusion within their classroom and have been found to be more invested in improving the learning experience for their students (Chao et al., 2017 as cited in Dellinger et al., 2008; Capara et al., 2006; Wertheim & Leyser, 2002; Bruce & Ross, 2008; Wolters & Daugherty, 2007; Chan, 2008). When teachers have a low level of self-efficacy when it comes to serving SWD, they are less likely or willing to adapt their teaching styles, persist with students who are struggling, or believe they can have a direct, positive impact on their students learning (Chao et al., 2017 as cited in Sharma, Loreman & Forlin, 2012; Bruce et al., 2010). In the classroom, self-efficacy can impact a teacher's personal philosophy and pedagogy when supporting all students within their classroom. The more regard teachers have for themselves and their teaching abilities, the more that they can push through

challenges, push students within their classroom, and adapt as needed to support positive student outcomes.

Research has found that the success of inclusion and teacher attitudes around the practice of inclusion have direct links to self-efficacy. Gaines & Barnes (2017 as cited in Barnes & Gaines, 2015; Brackenreed, 2011; Fuchs, 2010; Hwang & Evans, 2011; & Schwarzer & Hallum, 2008) asserted that not all teachers have the preparation or feel prepared enough to differentiate within the classroom, leading to negative teacher attitudes about inclusion, along with low self-efficacy that increases educator stress as they try to meet the needs of SWD in their classrooms. This research reveals a need for increased education or professional development for teachers to address their need of not feeling prepared to differentiate for students within their classroom. Aslan (2021) found that when teaching in inclusive classrooms that provide for SWD, teachers had lower levels of self-efficacy when it came to knowledge overall, and that the level at which a teacher graduated (undergraduate or graduate) impacted their level of self-efficacy, finding that graduate-level teachers had higher levels of self-efficacy regarding inclusion based on their level of education. Not only are teachers with only undergraduate degrees underprepared to serve inclusive classrooms, but also do not feel that they have adequate knowledge to implement inclusionary practices. The missing knowledge impacts overall teacher self-efficacy in the implementation of differentiation and inclusion, thus impacting teacher execution of these concepts and the performance of SWD within the general education setting. With the increase of SWD within the general education setting, there is a clear need for targeted professional development to address teacher concerns, thus increasing their self-efficacy to differentiate within the general education setting.

Professional Development, Self-Efficacy, and Inclusion

Professional development (PD) opportunities are essential for teachers to continue to refine their instructional practices and to learn about new ways that they can support all students within their classroom. With the diversity of experiences that teachers have in both educational practice and preparation, PD is a strong opportunity for staff to learn more about a practice and to implement it within a classroom setting, while also learning alongside colleagues.

When looking at both pre-service teacher education and PD, training on inclusion is becoming a priority. On an international level, Kubacka & D'Addio (2020) reviewed research pertaining to the 2020 Global Educational Monitoring, noting a positive trend in the number of countries that are changing their teacher education programs to teach towards inclusion; internationally, inclusion is a recognized high priority. Additionally, Dixon et al. (2014) found a direct, positive correlation between teacher self-efficacy in differentiation of instruction and the number of professional development hours provided, concluding that teacher self-efficacy improved the more professional development hours they were provided in differentiation. Furthermore, Gaines & Barnes (2017) found a need for the implementation of PD targeting inclusionary practices that is informed by the specific needs of the teachers participating. Each of these studies have found that it is necessary in today's educational environment to not only provide professional development to support the inclusion of SWD in the general education classroom, but also to ensure that the PD provided is specific to the needs of teachers to support the students they serve. If PD opportunities are provided to support inclusion and differentiation, teacher self-efficacy will be positively impacted, decreasing their stress, and enabling them to embrace differentiation within their classroom to support all students.

Ní Bhroin & King (2020) completed a mixed-methods study looking at the impact PD specific to the IEP process had on teacher practice and understanding. The study found that despite an increased need for teacher collaboration, after being provided professional development, teachers had a strong improvement in the use of both assessment and IEPs as pedagogical tools. Similarly, Martins & Chacon (2019) found that when teachers were provided specific PD to support SWD, there was an overall increase in the teachers' self-efficacy in the implementation of inclusion. To move the bar, increasing the effectiveness of inclusive education and to achieve higher rates of growth and performance for SWD, evidence supports teaching staff with targeted PD to support those needs. The more empowered teachers are, the more self-efficacy they will have towards inclusion and differentiation. The more teacher self-efficacy, the more SWD will be positively impacted by the instructional strategies and differentiation that their teachers are employing to support them.

School Profile

This school improvement project focuses on Drake Middle School. Drake Middle School is a part of Jefferson (Jeffco) County Public Schools in the Front Range area of Colorado. Jeffco Public Schools is the second largest school district in Colorado, serving students in eleven cities on the west side of Denver. In school year 2021-2022, Jeffco served 69,000 students throughout 155 schools. Students in the district are 66% White, 25% Hispanic, with the rest of another race or multiple races. Of the total student population, 31% qualify for free and reduced lunch. Jeffco Public Schools employs around 4,700 teachers, 99% of which are considered highly qualified per NCLB requirements, with 57% holding a master's degree.

Drake Middle School is in Arvada, Colorado and is one of the eleven schools that serve students in 6-8th grades in Arvada. Of the eleven schools, there are a variety of charter, option,

neighborhood, and special education-based programming available to families (Jeffco Public Schools [Jeffco] 2022). As of 2021-2022, Drake Junior High School has a student enrollment of over 900 students across grades six through eight. The student population is 78% white, 15% Hispanic, and the rest other races or multiple races. Of students enrolled at Drake, 20% qualify for free and reduced lunch, 3% of students are considered English Language Learners, 10% are identified as SWD, and 14% are identified as gifted and talented. Drake is considered a neighborhood school, which means that it directly serves specific neighborhood boundaries within Jefferson County. However, families do have the option to open enroll their student into Drake: roughly 29% of students were open enrolled in the 2021-2022 school year. The school website (Jeffco 2022) states that Drake's mission is as follows: "Together we create hope and passion through meaningful learning that balances the unique needs of students, so all are inspired to achieve full potential," with a vision "to become a dynamic and responsive community that provides a safe place to promote critical thinking, self-advocacy and respect for self and others."

In their report of school details, Jeffco (2022) details that academic programs offered at Drake include intervention courses, arts enrichment, some blended learning, English Language support, 1:1 technology, and project-based learning opportunities. Additionally, students have an abundance of elective offerings, including but not limited to drama, orchestra, Spanish, vocal music, sports, concert band, and health sciences. To support student identity and sense of community, students are divided into two cohorts in each grade. Each cohort within a grade-level consists of an ELA, mathematics, science, and social studies instructor whom all students within the cohort share. The rest of each student's schedule is influenced by academic elective choice and/or additional support needed (IEP services, intervention, ELD support, etc.).

Special education programming at Drake currently involves both a center-based program to support students with autism and mild/moderate special education support inside and outside of the classroom. Currently, students are served per details in their IEP, which are typically small-group, intervention-based courses in mathematics or English, along with co-taught instruction in math and ELA. Students are strategically placed in classes/classrooms based on minutes detailed in their IEPs. Special Educator schedules are determined based on student need, with co-taught or pull-out courses restricted to no more than 20% of students within a general education course identified as SWD.

Statewide testing data is not yet available for the 2021-2022 school year but is for 2020-2021. In 2021, 7th grade students took the CMAS (Colorado Measures of Academic Success) reading and writing assessment, while 6th and 8th grade students took the math assessment. For reading and writing, 51% of the 263 students assessed met or exceeded expectations. For mathematics, out of 256 6th grade students assessed, only 34% met or exceeded expectations. Of the 195 8th grade students, 50% met or exceeded expectations. It should be noted that in all three testing cases, participation rates were below 95% in every grade level, which could indicate that the data may not be representative of the entire school population.

The Colorado Department of Education (2021) published both academic achievement and academic growth statistics for state testing. On the ELA statewide assessment, students in the 7th grade at Drake were in the 68th percentile with a mean scale score of 747.6. Although overall student data exceeded expectations, the performance of SWD did not meet expectations, scoring in the 1st percentile with a mean scale score of 706.6. In mathematics, Drake 6th and 8th grade students scored in the 79th percentile, again exceeding expectations; however, SWD scored at the 1st percentile, which was considered not meeting expectations. In addition to overall academic

achievement on state testing, the Colorado Department of Education (2021) reported the median student growth percentiles (MGP) on both ELA and mathematics. In 2021, students without disabilities experienced a MGP of 28 in ELA and 34 in mathematics, while SWD experienced an MGP of 24 in ELA and a 40 in mathematics.

In addition to state testing, Drake participates in district testing three times yearly. Jeffco Public Schools (2022) uses the MAP (Measures of Academic Progress) test in mathematics and reading to evaluate student achievement and growth over the course of the year. MAP is an adaptive, nationally normed assessment that adjusts to a student's level based on how they are responding to assessment content. By taking MAP three times a year, it is hoped that teachers can respond to data in a timelier manner to support students, rather than looking at an end-of-year evaluation to which they may not be able to respond in a timeframe that best supports student achievement and growth. MAP has five achievement levels (High, High Average, Average, Low Average, and Low) suggesting how many students would be considered proficient or better on the State assessment.

Per the Jeffco Public Schools (2022) school insights data page, the percentage of students who score either High or High Average on MAP performance at Drake is either at or above par compared to other schools in the district. During the 2021-2022 school year, 55% of students scored at the High or Above Average range in reading and 50% of students in mathematics. Per national averages, Drake is at the 51st percentile regarding MGP in reading and in the 60th percentile for MGP in mathematics. However, students who specifically receive special education services do not perform as well on the MAP assessment. By the end of the 2021-2022 school year, 53% of SWD fell in the Low category and 21% fell in the Low Average category, while only 15% of SWD fell in either the High or High Average range on the ELA assessment.

In mathematics, 67% of SWD fell in the Low category and 17% fell in the Low Average category, while only 16% of SWD fell in either the High or High Average range. Despite Drake performing more favorably on district assessments and meeting national norms, SWD are behind their general education peers in both performance and growth.

School Insights (2022) provides additional data about parent involvement and staff attitudes. Families are encouraged to participate in a yearly survey regarding their school's culture and communication. In the 2021-2022 school year, 203 families from the Drake Middle School population responded. Compared to district data, Drake scored in the average range in terms of families feeling welcomed, supporting student success, speaking up for every student, and sharing power with families. Although Drake falls in the average range, it scored below the district average in all the identified categories. However, Drake did score in the highest 25% of all schools in their ability to communicate effectively and collaborate with the community, falling within three percentage points of the overall district averages in these domains. Drake has an overall favorability rating of 74% within the district based on parent feedback.

Staff data regarding their experience at Drake has staff scoring an overall favorability of 70%, with half of the staff participating in the survey. Overall, the general reflection score for staff is well above the district at 91% favorability, with highlights for staff under communication, support, involvement, instructional practices and support, teacher leadership, and school leadership. Areas of growth for Drake according to the educational staff apply to facilities and resources, time, professional development, and managing student conduct. The lowest scores for educators who took the survey were in areas of time and professional development, scoring a 46% for both areas, compared to district scores between 55-68% in those areas.

Needs Assessment

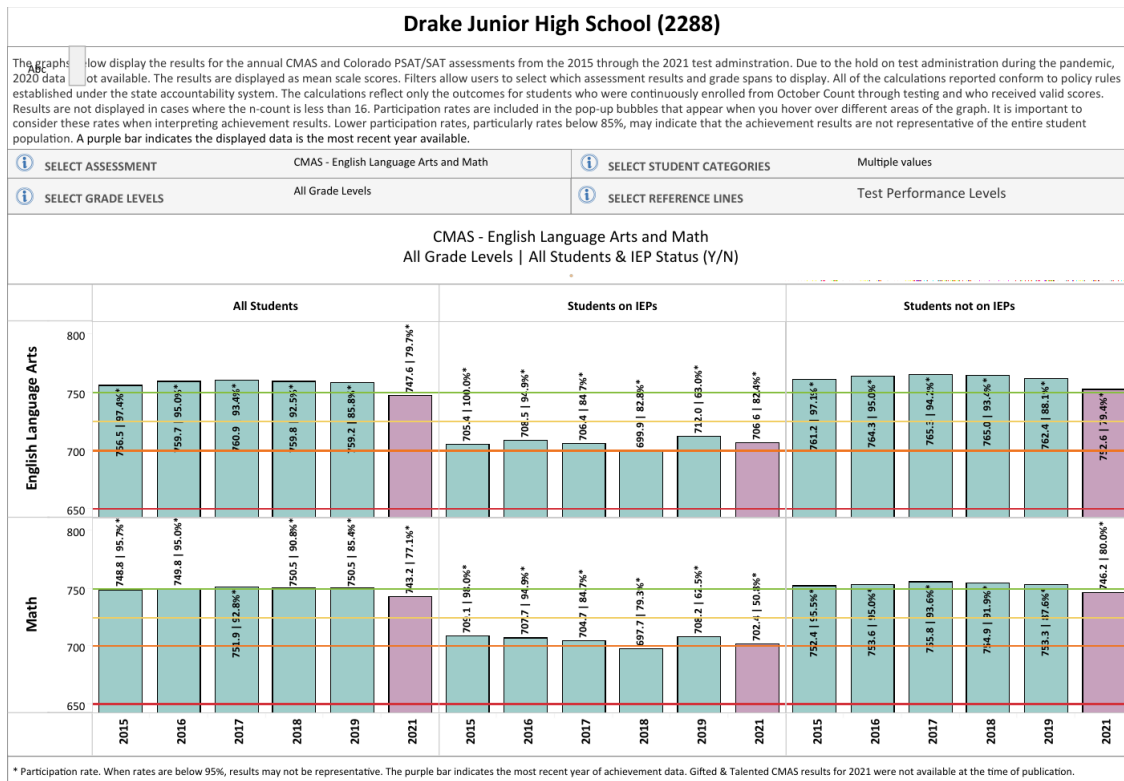
Based on school profile data, the area of improvement for this project falls under the category of Professional Development and Staff Capacity. As was considered in the Literature Review, there is relevant research as to the positive relationship between teacher self-efficacy and professional development. Additionally, there is relevant research indicating that in the realm of inclusion, many teachers struggle to differentiate for SWD due to a lack of positive self-efficacy in their abilities. Based on the reviewed research, there are positive outcomes for teachers in increasing their self-efficacy when professional development is provided. Thus, if school-specific professional development were to be provided to Drake Middle School staff during the 2022-2023 school year to develop their self-efficacy in the differentiation of materials and inclusion, research suggests that there will be positive outcomes for teachers. With an increase in self-efficacy, not only will teachers be more confident in their implementation of differentiation techniques such as accommodations, but also their time can be better spent as they become more efficient in designing and implementing the supports outlined for SWD within their IEPs.

Data Analysis

Of the entirety of the Drake Middle School's student population, approximately 10% of students are identified as having a disability that require special education services. For SWD, there is a measurable gap in both performance and growth when compared to their nondisabled peers. As is shown in Figure 1, on state assessments in ELA, SWD scored at first percentile, while their non-disabled peers scored at the 68th percentile. Additionally, SWD scored at the first percentile on the state math assessment, while their non-disabled peers scored at the 79th percentile. On the state assessment alone, SWD are 50 percentile points or more below that of their non-disabled peers.

Figure 1

Drake Middle School CMAS English Language Arts and Mathematics Performance Data

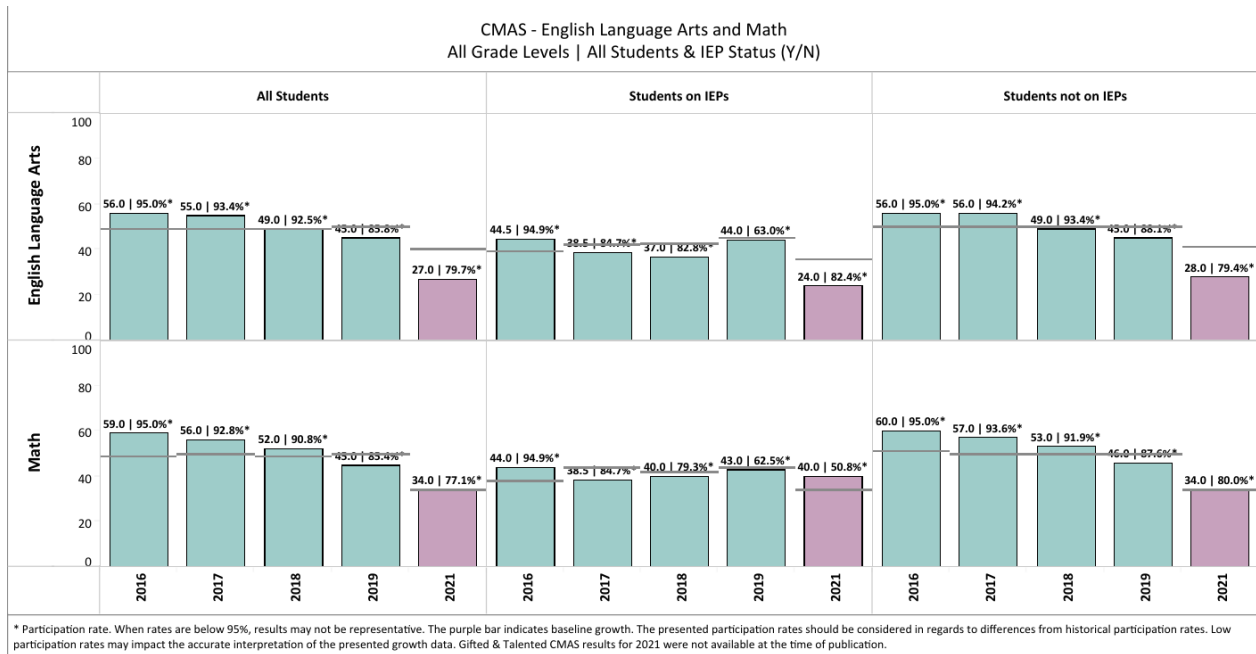


The Colorado Department of Education (2021) reported strong mathematics MGP data for SWD for the 2021 spring testing session. As is demonstrated in Figure 2, in the spring of 2021, SWD experienced a MGP of 40, compared to their non-disabled peers who had a MGP of 34 in mathematics. A reverse gap, in which SWD outgrow their non-disabled counterparts, is what educators would like to see to demonstrate that SWD are closing their educational gaps. In ELA, SWD grew less than their non-disabled peers in terms of MGP, scoring a 24 compared to 28. This result means that in ELA, SWD are growing at a lower rate than their peers. However, the 2021 school year is the first time in recent years that the reverse in MGP was experienced in any discipline. For example, in 2017, mathematics data in Figure 2 show that SWD had an MGP of 38.5, while their non-disabled peers experienced an MGP of 57. It should be noted that the

MGP for both subgroups are lower than pre-pandemic testing periods. Additionally, it should be noted that we cannot determine the root cause for the change in MGP.

Figure 2

Drake Middle School CMAS English Language Arts and Mathematics MGP Data



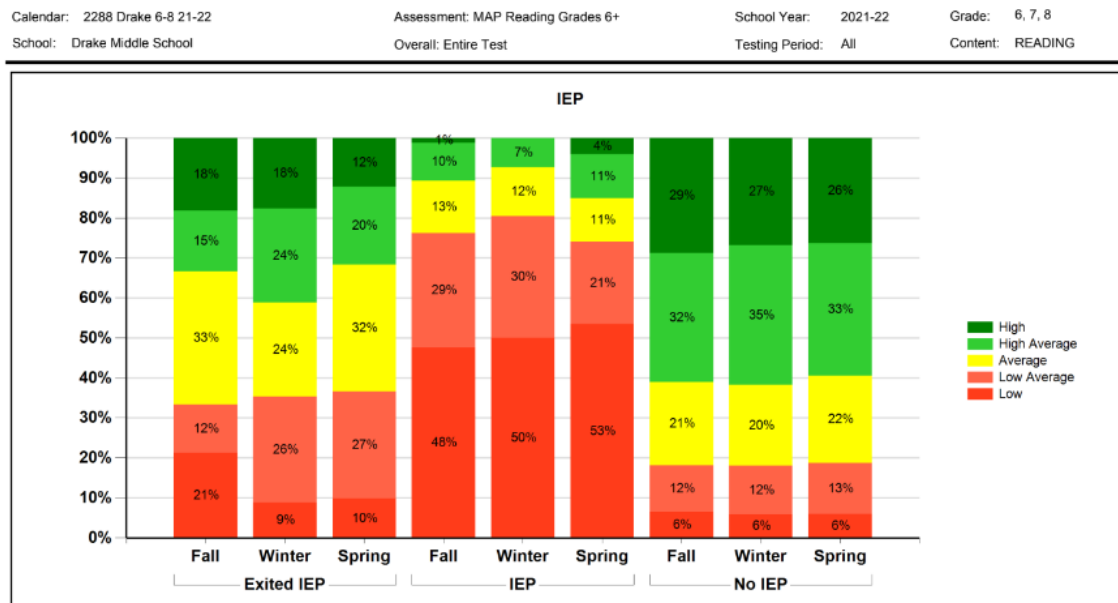
Although the MGP of SWD and students without disabilities demonstrate high levels of growth in mathematics, there is still a growth gap in ELA. Additionally, in terms of overall performance, students without disabilities experience a vastly greater level of success and ability to demonstrate that they can perform at grade-level. Without a higher MGP in ELA, SWD are not closing their gaps, but rather, are maintaining or widening the gaps that they currently possess. Overall, this data indicates that there is a need in both their achievement and MGP for SWD. The goal would be for SWD to experience both a high MGP, closing their academic gaps, and a higher percentage of students approaching grade-level expectations on state assessments.

Additionally, SWD struggle on district assessments such as MAP, with most of them scoring in the low or low average category in both mathematics and ELA. As referenced in

Figure 3, on the ELA assessment, 53% of SWD fell into the Low category, and 21% of SWD fell into the Low Average category by the end of the school year. Although there was a higher percentage of SWD who fell into the High or High Average category by the end of the academic year, over 80% of the overall population of SWD did not meet academic expectations. This data is in comparison to student without IEPs, in which only 6% and 16% of students fell into the low or low average category.

Figure 3

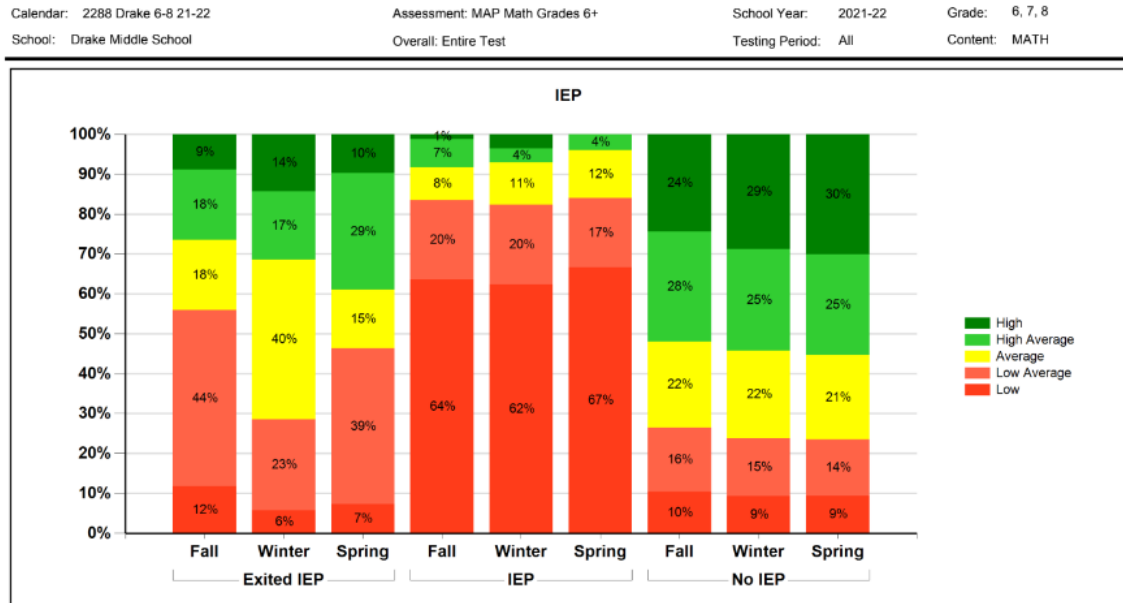
Drake Middle School MAP Reading Performance Data



On the mathematics assessment, as displayed in Figure 4, 67% of SWD fell in the Low category, and 17% of SWD fell into the Low Average category by the end of the academic year. In comparison, only 9% and 14% of students without an IEP who fell into the Low or Low Average category. MAP data is a clear demonstration of the gaps that SWD possess in comparison to their non-disabled peers and the need for supports that would allow them to close their academic gaps.

Figure 4

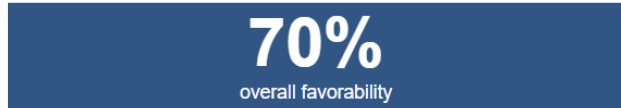
Drake Middle School MAP Mathematics Performance Data



Lastly, based on school specific data, not only is the performance of SWD an area of growth for Drake, but also, the need for professional development as indicated by staff (see Figure 5). Direct teacher data provided through a survey of Jeffco Public School teachers about their school’s work environment indicates that Drake Middle School staff has identified areas of need in time and professional development. These were their lowest scores overall and were lower than other areas surveyed. Although these categories are non-specific as to what teachers want in terms of professional development or time considerations, providing teachers support in the inclusion of SWD within their classroom and differentiation could support growth in both of those areas because teachers can increase their knowledge of inclusionary practices, along with become more efficient in their design and implementation of specific supports for SWD.

Figure 5

Drake Middle School Staff 2021-2022 Insights Survey Results



Category	School ¹	District
School Leadership	73%	80%
Teacher (Staff) Leadership	74%	79%
Managing Student Conduct	66%	77%
Instr. Practices & Support	82%	85%
Professional Development	46%	68%
Time	46%	55%
Facilities & Resources	77%	86%
Comm. Support & Involvement	89%	85%
Overall (General) Reflection	91%	83%

¹ 51% of 70 educators participated.

² Data were collected by and provided by the Colorado Department of Education. Results include feedback from employees in multiple positions: Educators, Education Professionals or Service Providers, and School Leaders.

Action Plan

Costley (2013) and Everling (2013) asserted that although teachers have an overall powerful desire to support SWD within their classrooms, they often do not have the self-efficacy to do so due to a lack of resources and knowledge. Consequently, there is a prevailing negative attitude around inclusionary practice as it takes additional time and planning to support the range of needs within a classroom. Thus, teachers struggle to implement instructional strategies that support the ability of SWD to access grade-level curriculum as is mandated by IDEA (Gaines & Barnes 2017 as cited in Alahbabi, 2009; Hwang & Evans, 2011; Itkonen, 2007; Odom, Buysse, & Soukakou, 2011; Wah, 2010). These feelings are despite positive research demonstrating that inclusive practices in which students participate in general education 80% or more of the time have positive outcomes (Cole, 2021; Choi et al., 2020; Tremblay, 2013; Theobald et al., 2019; and Lombardi et al., 2013). Overall, there is strong potential for positive academic growth for SWD when inclusion and differentiation are implemented with fidelity; however, teachers do not

have a positive sense of self efficacy to implement these instructional strategies with fidelity, making the practice a drain on their time and resources.

If teachers' self-efficacy in these areas were to be supported, positive outcomes for both educators and students can be realized. Teachers who have a high sense of self efficacy are able to persevere through challenges within their classroom, support and push students within their classrooms, adapt to individualized student needs within their classroom, try new instructional strategies within their classroom, and overall have an increased investment in making the learning experience for all students a positive one within their classroom (Chao et al., 2017 as cited in Dellinger et al., 2008; Capara et al., 2006; Wertheim & Leyser, 2002; Bruce & Ross, 2008; Wolters & Daugherty, 2007; Chan, 2008). The best way to improve teacher self-efficacy is to provide meaningful professional development that is targeted towards the specific needs of the academic staff, which in the case of Drake Middle School would be geared toward inclusion and differentiation (Dixon et al., 2014; Gaines & Barnes, 2017; Ní Bhroin & King, 2020; Martins & Chacon, 2019).

To address both the need for increased support and professional development, thus providing teachers with the tools to increase their self-efficacy, the first step would be to gather specific data regarding SWD at Drake. Once staff return in August of 2022, the first data that should be analyzed are the types of accommodations that are most frequently listed within the IEPs at Drake (e.g., timing accommodation such as extended time or setting accommodations such as small group). The top ten most frequently mentioned accommodations would be included on a staff-wide self-efficacy survey about these accommodations. The self-efficacy survey will be developed based on The Teacher Attitudes Toward Inclusion Scale (TATIS) developed by Cullen, Gregory, & Noto (2010), which evaluates overall teacher attitudes toward inclusion and

their self-efficacy and confidence around the top ten accommodations mentioned in student IEPs. After the survey is administered to teaching staff, the five accommodations/modifications that receive the lowest self-efficacy scores will be identified.

After the five accommodation/modifications are identified, five professional development sessions around these supports will be developed and presented to school staff by November of 2022. The content-based professional development sessions will focus on basic definitions of the supports, what type of accommodation or modifications they are, examples of the implementation of the accommodations, and common educator concerns. Ideally, support outside the PD session will be offered for specific feedback on a lesson or to provide time supporting implementation of the accommodation with the hope that if there are additional questions or concerns, they can be addressed outside of the PD session.

At the conclusion of the five PD sessions, the same self-efficacy survey will be given to staff. The only changes to the survey will be that it will include only the five accommodations or modifications targeted by professional development sessions. Additionally, a section will be added to receive teacher feedback and to identify if a staff member would like additional support around specific accommodations. Based on survey results, individualized follow-up with staff can be given to support either a continued low level of self-efficacy around specific accommodations or additional support based on staff advocacy within the survey.

Table 1

Steps, Actions, and Outcomes of proposed School Improvement Plan

Step	Actions	Outcomes
1	<ul style="list-style-type: none"> Review IEPs of current Drake middle school students 	<ul style="list-style-type: none"> Content for self-efficacy survey

	<ul style="list-style-type: none"> Select top ten most frequently mentioned accommodations /modifications 	
2	<ul style="list-style-type: none"> Develop staff self-efficacy survey to be administered to teaching staff by end of first month of school Administer self-efficacy survey by mid-September 	<ul style="list-style-type: none"> Data regarding staff efficacy around most frequented IEP accommodations and modifications
3	<ul style="list-style-type: none"> Based on survey data, the five accommodation/modifications with the lowest educator self-efficacy will be selected Five professional development sessions (30 minutes to 1 hour in length) based on educator data will be developed 	<ul style="list-style-type: none"> High leverage/ need accommodations/ modifications will be selected to develop professional development
4	<ul style="list-style-type: none"> Dates for accommodation/modification training will be selected and communicated to school staff Professional development sessions will be implemented by beginning of November 2022 	<ul style="list-style-type: none"> School specific accommodation/ modification training is provided to staff
5	<ul style="list-style-type: none"> Self-efficacy survey readministered after the conclusion of PD sessions, pertaining only to the accommodations/ modifications that had training. Additional section added for staff feedback and additional support needed Data is analyzed to see if there was an increase in educator efficacy in targeted supports after the implementation of PD 	<ul style="list-style-type: none"> Data is collected and analyzed for growth and feedback
6	<ul style="list-style-type: none"> Additional follow up support provided to specific staff based on survey data 	<ul style="list-style-type: none"> Follow up with staff based on survey data Additional support provided to educators who still experience lower self-efficacy in targeted accommodations or had additional needs per survey

Note. This table lists displays the proposed steps, actions, and outcomes involved in the proposed school improvement plan.

Implementation of School Improvement Plan

There are multiple measures we can consider to assess the effectiveness of the professional development series (the success of the intervention). The root of this school improvement plan is centered around increasing teacher self-efficacy, with the secondary outcome of increasing student achievement. The primary measure to see if the intervention worked will be an increase in teacher self-efficacy as measured by an increase in the educator self-evaluations of their own self-efficacy from the pre-survey to the post-survey. The second outcome that we could measure is the achievement and growth of SWD after the implementation of the professional development.

The primary outcome of measuring teacher self-efficacy will be determined through the staff survey administered at the beginning of the school year, which will guide the professional development, and the second staff survey administered after the conclusion of the professional development series. The initial survey to determine the areas of professional development will be administered by mid-September of 2022. This timeline will ensure that the teaching team has adequate time to review current IEPs for accommodations and modifications and allows teachers to settle into their classrooms at the beginning of the school year. Second, the special education team will have 7-8 weeks to design and implement professional development that targets areas of need identified through the staff self-efficacy survey. Each professional development session does not need to be completed at the same time, but ideally, all sessions will have been given by the second week of November 2022. At the conclusion of the five professional development sessions, the post-survey will be administered by the special education team to analyze what strides in self-efficacy were achieved for general education staff through the offering of targeted professional development. To be considered successful, teacher self-efficacy will increase by

25% from initial survey responses for the targeted accommodations as measured by the post-survey results. Teacher feedback gathered from the post-survey can be used to guide additional professional learning opportunities for the teaching staff for the duration of the school year and provide insight for future professional development opportunities.

Rationale for this timeline is that by keeping the plan within one semester, adjustments and supports can be made/provided prior to the midway point of the school year. Additionally, if there are positive results and attitudes towards the professional development, more can be provided to staff based on post-survey results. Additionally, to address the secondary outcome of student achievement, students will be taking their Winter MAP benchmark at the beginning of December before the end of the semester. By having professional development before the administration of MAP testing, the team can see how much growth was made during the first semester by SWD and can either provide more support for semester two or see if there is additional growth as the overall teaching team becomes more self-efficacious in implementing the identified accommodations. Students will take the MAP assessment, along with the State assessment in the Spring of 2022, which will allow for the special education team to see year-over-year growth and achievement for SWD and determine if further professional development should be implemented the following year, or if changes should be made to the protocol.

The primary owner of this plan will be the researcher through the administration and development of the staff surveys, along with data analysis. Administrator support will be essential in creating staff buy-in to honestly answer the pre- and post-surveys, along with providing the space and buy-in for attending professional development sessions. Additionally, support and collaboration from other special education team members would be needed in all areas as experts in the field. If they are willing, special education teachers would be able to

provide collaboration for the professional development sessions, providing examples of accommodations and differentiation within general education classrooms, along with creating overall staff buy-in to support SWD.

There are a variety of barriers or challenges that could impede the success of the plan. Firstly, educator buy-in to the professional development surveys and series could have an impact on effectiveness. If strong buy-in is not established by the special education team, and the “why we do this” is not presented, educators will not get the maximum benefit from the professional development. Negative responses could exhibit in a variety of ways: educators not participating in the professional development series, educators unwilling to attempt implementation of targeted accommodations, or schedule conflicts preventing full participation in the professional development series. It will be important for teacher leaders within the project (administrators, special education staff, and any general education staff who are fluent in differentiation) to express passion for the series and provide others within the community a strong “why” in order to build investment and buy-in. With this encouragement, teachers will be more willing to try new things, a unified goal can be established, and a positive atmosphere can be created around professional development sessions. If there is strong community investment, outcomes are more likely to be favorable, rather than being seen as just one more demand on teachers’ time.

Another potential barrier or challenge to this improvement project would be overall participation in the professional development sessions. If teachers are not provided with the time or space to really “dig-in” and receive this support, they could ultimately reject the support due to feeling overwhelmed. As was established in the Drake Middle School insights data, time is an area of concern for many staff members, so the professional development offered needs to honor the time and energy of the staff who are attending to build momentum and self-efficacy rather

than contribute to the drain that all educators feel. This intervention is meant to build teacher capacity and self-efficacy so that the time element of inclusion and differentiation seems less overwhelming and more streamline. If the PD is not worthwhile, it could do more harm than good in changing mindsets and growing self-efficacy.

Overall, thoughtfulness around planning, development, and execution is going to be essential in developing educator buy-in and willingness to participate. If the team can create the desired buy-in and “why” that is necessary, teachers will be more likely to implement the accommodations with fidelity, seek support in their own development, and develop more positive attitudes toward inclusion overall.

Conclusion

The self-efficacy of educators can have a direct impact on students and classrooms. In terms of inclusion and special education, many educators have a low sense of self-efficacy, which can impact their view of inclusion. However, research demonstrates that with targeted PD, educators can gain skills and confidence in their ability to differentiate for SWD and increase their self-efficacy. Through this process, teachers will be more inclusive of all students that enter their classroom. Drake Middle School staff will see gains in teacher self-efficacy of the implementation of accommodations that are mentioned frequently within the IEPs of students in their school through participation in targeted PD that has been developed based on direct staff feedback and student needs within their building.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Blazer, C. (2017). Review of the Research on Inclusive Classrooms: Academic and Social Outcomes for Students with and without Disabilities; Best Practices; and Parents' Perceptions of Benefits and Risks. Information Capsule. Volume 1701. *Research Services, Miami-Dade County Public Schools*.
- Bruce, C. D., Esmonde, I., Ross, J., Dookie, L., & Beatty, R. (2010). The Effects of Sustained Classroom-Embedded Teacher Professional Learning on Teacher Efficacy and Related Student Achievement. *Teaching and Teacher Education: An International Journal of Research and Studies*, 26(8), 1598-1608. <https://doi.org.ezproxy.nwciowa.edu/10.1016/j.tate.2010.06.011>.
- Bruce, C. D., & Ross, J. A. (2008). A Model for Increasing Reform Implementation and Teacher Efficacy: Teacher Peer Coaching in Grades 3 and 6 Mathematics. *Canadian Journal of Education*, 31(2), 346-370. <http://ezproxy.nwciowa.edu/login>.
- Caprara, G. V., Barbranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' Self-Efficacy Beliefs as Determinants of Job Satisfaction and Students' Academic Achievement: A Study at the School Level. *Journal of School Psychology*, 44(6), 473-490. <https://doi-org.ezproxy.nwciowa.edu/10.1016/j.jsp.2006.09.001>.
- Chan, D. W. (2008). General, Collective, and Domain-Specific Teacher Self-Efficacy among Chinese Prospective and In-Service Teachers in Hong Kong. *Teaching and Teacher Education: An International Journal of Research and Studies*, 24(4), 1057-1069. <https://doi-org.ezproxy.nwciowa.edu/10.1016/j.tate.2007.11.010>.

- Chao, C. N. G., Sze, W., Chow, E., Forlin, C., & Ho, F. C. (2017). Improving teachers' self-efficacy in applying teaching and learning strategies and classroom management to students with special education needs in Hong Kong. *Teaching and Teacher Education, 66*, 360-369.
- Choi, J. H., McCart, A. B., & Sailor, W. (2020). Achievement of Students with IEPs and Associated Relationships with an Inclusive MTSS Framework. *The Journal of Special Education, 54*(3), 157–168. <https://doi.org/10.1177/0022466919897408>.
- Cole, S. M., Murphy, H. R., Frisby, M. B., Grossi, T. A., & Bolte, H. R. (2021). The Relationship of Special Education Placement and Student Academic Outcomes. *The Journal of Special Education, 54*(4), 217–227. <https://doi.org/10.1177/0022466920925033>.
- Colorado Department of Education. (2021, February 3). District and school dashboard. CDE. Retrieved June 29, 2022, from <http://www.cde.state.co.us/district-school-dashboard>.
- Costley, K. C. (2013). *Ongoing Professional Development: The Prerequisite for and Continuation of Successful Inclusion Meeting the Academic Needs of Special Students in Public Schools*. (). Retrieved from Education Collection; ERIC <http://ezproxy.nwciowa.edu/login>.
- Cullen, J. P., Gregory, J. L., & Noto, L. A. (2010). *The Teacher Attitudes Toward Inclusion Scale (TATIS) Technical Report*. (). Retrieved from Education Collection; ERIC <http://ezproxy.nwciowa.edu/login>.

- Dellinger, A. B., Bobbett, J. J., Olivier, D. F., & Ellett, C. D. (2008). Measuring teachers' self-efficacy beliefs: Development and use of the TEBS-Self. *Teaching & Teacher Education*, 24(3), 751-66. <http://dx.doi.org/10.1016/j.tate.2007.02.010>.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated Instruction, Professional Development, and Teacher Efficacy. *Journal for the Education of the Gifted*, 37(2), 111–127. <https://doi.org/10.1177/0162353214529042>.
- Education for All Handicapped Children Act, Pub. L. No. 94–142 (1975).
- Everling, K. M. (2013). Special Education Students in a general education classroom: Texas educators' perspectives. *Journal of Education and Human Development*, 2(2), 1-14.
- Every Student Succeeds Act (ESSA), Pub. L. No. 114-95 (2015).
- Gaines, T., & Barnes, M. (2017). Perceptions and Attitudes about Inclusion: Findings across All Grade Levels and Years of Teaching Experience. *Cogent Education*, 4(1), 1-11. <https://doi-org.ezproxy.nwciowa.edu/10.1080/2331186X.2017.1313561>.
- Gilmour, A. F., Fuchs, D., & Wehby, J. H. (2019). Are Students with Disabilities Accessing the Curriculum? A Meta-Analysis of the Reading Achievement Gap Between Students with and Without Disabilities. *Exceptional Children*, 85(3), 329–346. <https://doi.org/10.1177/0014402918795830>.
- Hawpe, J. C. (2013). *Secondary Teachers' Attitudes Toward and Willingness to Provide Accommodations and Modifications for Students with Disabilities* (Order No. 3538967). Available from Education Database; ProQuest Central; Publicly Available Content Database. (1328120165). <http://ezproxy.nwciowa.edu/login?url=https://www-proquest->

com.ezproxy.nwciowa.edu/dissertations-theses/secondary-teachers-attitudes-toward-willingness/docview/1328120165/se-2.

Individuals with Disabilities Education Improvement Act, Pub. L. No. 108–446, 118 Stat. 2647 (2004). Available from [http:// idea.ed.gov/](http://idea.ed.gov/).

Jeffco Public Schools. (2022). District Profile. Jeffco Public Schools. Retrieved June 29, 2022, from https://www.jeffcopublicschools.org/about/district_profile.

Jeffco Public Schools. (2022). School Insights—Drake Junior High. Jeffco Public Schools. Retrieved June 29, 2022, from [https://jeffcopublicschools.shinyapps.io/SchoolInsights/?School ID=2288](https://jeffcopublicschools.shinyapps.io/SchoolInsights/?SchoolID=2288).

Jeffco Public Schools. (n.d.). Home—Drake Middle School. Drake Middle School Dragons. Retrieved June 29, 2022, from <https://drake.jeffcopublicschools.org/>.

Kubacka, K., & D’Addio, A. C. (2020). Targeting Teacher Education and Professional Development for Inclusion. *Journal of international cooperation in education*, 22(2), 89-106.

No Child Left Behind Act, Pub. L. No. 107–110, 115 Stat. 1425 (2002). Retrieved from <http://www2.ed.gov/nclb/landing.jhtml>.

Rhodes, G. (2022, January 25). 2021 Annual report to Congress on the implementation of the idea. Individuals with Disabilities Education Act. Retrieved July 6, 2022, from <https://sites.ed.gov/idea/2021-individuals-with-disabilities-education-act-annual-report-to-congress/>.

- Schulte, A. C., & Stevens, J. J. (2015). Once, Sometimes, or Always in Special Education: Mathematics Growth and Achievement Gaps. *Exceptional Children*, 81(3), 370–387. <https://doi.org/10.1177/0014402914563695>.
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12e21. <http://dx.doi.org/10.1111/j.1471-3802.2011.01200>.
- U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), Various years, 1996–2017 Mathematics and Reading Assessments. https://www.nationsreportcard.gov/focus_on_naep/student_groups/#/students-with-disabilities/performance.
- U.S. Department of Education. (2022, February 25). Digest of Education Statistics, 2020. National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education. Retrieved June 22, 2022, from https://nces.ed.gov/programs/digest/d20/tables/dt20_204.60.asp.
- Wertheim, C., & Leyser, Y. (2002). Efficacy beliefs, background variables, and differentiated instruction of Israeli prospective teachers. *Journal of Educational Research*, 96(1), 54e63. <http://dx.doi.org/10.1080/00220670209598791>.
- Williamson, P., Hoppey, D., McLeskey, J., Bergmann, E., & Moore, H. (2020). Trends in LRE Placement Rates Over the Past 25 Years. *The Journal of Special Education*, 53(4), 236–244. <https://doi.org/10.1177/0022466919855052>.
- Wolters, C. A., & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: Their relation and association to teaching experience and academic level. *Journal of*

Educational Psychology, 99(1), 181-193. <https://doi-org.ezproxy.nwciowa.edu/10.1037/0022-0663.99.1.181>.

Wright, A. M., & Meyer, K. R. (2017). Exploring the Relationship Between Students Needing Accommodations and Instructor Self-Efficacy in Complying with Accommodations. *Higher Learning Research Communications*, 7(1), 65-83. <http://ezproxy.nwciowa.edu/login?url=https://www-proquest-com.ezproxy.nwciowa.edu/scholarly-journals/exploring-relationship-between-students-needing/docview/1941336740/se-2>.