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**EFFECTIVE GRADING PRACTICES BENEFIT MAINSTREAMED STUDENTS WITH
INTELLECTUAL DISABILITIES**

**A MASTER'S THESIS
SUBMITTED TO THE FACULTY
OF BETHEL UNIVERSITY**

BY

JESSIE M. WICK

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
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OCTOBER 2023

BETHEL UNIVERSITY

**HOW EFFECTIVE GRADING PRACTICES BENEFIT MAINSTREAMED
STUDENTS WITH INTELLECTUAL DISABILITIES**

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Abstract

This study reviews the literature pertaining to grading practices and how grades can affect students with intellectual disabilities who are mainstreamed. It includes research into teacher grading practices, messages that grades reflect and communicate, and the processes involved in changing grading practices to better reflect student's comprehension of the course content at their level of ability. Many studies have indicated that despite traditional-based grading subjectivity, it is still widely used and not an effective measure of a student's understanding of the grade-level standards. This thesis explores effective ways to assess students' understanding of subject content and standards and how utilizing these would, in turn, also enable teachers to effectively assess students with intellectual disabilities in the mainstream classroom. The literature review includes research to improve collaboration between teachers, administrators, and districts moving forward in ensuring that the growing number of students with intellectual disabilities in the classroom can be assigned with meaningful grades that reflect their understanding of the grade and content standards.

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CHAPTER I: INTRODUCTION

Reasons for this topic

Many students who are identified with intellectual disabilities and meet the criteria to receive special education services spend much more time in mainstream classrooms with their peers. Mainstreaming such students began in the 1980s, with the number of students increasing since then. These students face a constant barrage of messages comparing them to their peers without allowances for their individual disabilities and are often excluded by their peers (Babik & Gardner, 2021). Often, school becomes a place that spotlights their disabilities and makes it difficult for these students to see and recognize individual gains in personal understanding and comprehension of classroom content. Despite accommodations and modifications included in a student's Individualized Education Program Snapshot given to mainstream teachers, some students are still not assessed or measured with their disabilities in mind, and this can lead to behaviors competing with active participation in the classroom in addition to making it difficult to be successful academically (Lee et al., 2010). These students then see how their disabilities affect their assignment and report card grades compared to their non-disabled peers, once again confirming that they do not measure up.

Even though most teachers in the classroom today received their education degrees after the early 1990s when mainstreaming students was the norm, many general education teachers fail to understand that it is not reasonable to compare and assess these students' learning abilities with their peers. The origin of this is unclear, yet it appears it stems back to the content colleges and universities utilize in teaching future general educators. There must be a more effective way to convey and measure these students' growth in understanding content knowledge.

Meanwhile, special education teachers are struggling to both advocate for the students on their caseloads and find ways to collaborate with the general education teachers to ensure that students are assigned grades reflecting usable information about each student's abilities in the classroom. Special education teachers have heard many different reasons given by the general education teachers who assign certain grades to intellectually disabled students. Still, the biggest hurdle is informing general education teachers that comparing these students to their non-disabled peers is neither fair nor does it accurately convey progress in the general education classroom. If a student's intelligence quotient (IQ) is 64, and his work in the classroom compared to their peers is 65%, they most certainly do not deserve a letter grade of (D). Such a student is likely working at maximum potential and should be encouraged! Similarly, if a student is unable to successfully meet the subject grade standards because of an intellectual disability, there needs to be a way that the district, school, and teachers can measure the progress and successes with a grading system that reflects what that student can learn while still being challenged academically. This thesis topic was derived out of both necessity and curiosity as to how and why many schools across the country are still using a grading system that is both outdated and fails to give a clear picture of what students have learned while also neglecting to offer ways to grade a population of students who have an intellectual disability.

General education teachers are often given ineffective tools such as grading applications where the teacher just enters the grade for each assignment, and the computer generates a grade according to how each assignment is weighted. While that system may work for the majority of students who are non-disabled, it leaves the general education teacher in a quandary as to how to assign a grade to those students in the classroom with an intellectual disability. That system,

many times, also fails to give a good picture of what the students' understanding is on that subject content. An example of this arose at a recent grading workshop. A high school principal wanted to test the reasoning of the workshop based on the book Grading from the Inside Out by comparing the assigned grades a group of students received to how these students performed on their state assessments in that subject (Schimmer, 2016). The results were disturbing; out of forty students in one grade, one-half of the students who received A's for a semester grade did not meet state standards for that subject, while two-thirds of the students who received F's for a semester grade exceeded the standards. Most would infer that this grading system favored those who handed in everything on time and whose behavior was exemplary while failing to assess the student's understanding of the state subject standards.

The overwhelming reasoning for traditional-based grading still seems to be that higher education looks at grade point averages when evaluating potential students. Yet, this recent test that a small school principal explored probably does not reflect what higher education institutions understand that grades are measuring.

Research Rationale

During the first year as a teacher of record, this researcher worked with students with developmental cognitive disabilities in grades kindergarten through twenty-one. This thesis writer identified that many general education teachers are unsure how to grade students who have an intellectual disability. Too often, these students are still compared to their peers and given low grades that do little to motivate their learning. While understanding that everyone working in schools today is beyond busy trying to keep the ship afloat, many general education teachers are unfamiliar with how to implement accommodations and modifications to a student's

Individual Education Program (IEP). The accommodations and modifications on the IEPs are designed to enable the student to be successful in the general education classroom.

The topic for this thesis option will be a literature review focusing on the idea of how effective grading practices in the mainstream classroom can benefit students with intellectual disabilities. There will be a focus exploring the following questions: What are effective grading practices? What are the messages that grades reflect, and what are the processes involved in changing grading practices to include the student's individual abilities?

Teachers have been comparing students' abilities and assigning grades, measuring their progress by comparing them to their peers, for centuries. It was not until mainstreaming special education students became more prevalent in the early 1990s that teachers had to integrate how to assess students' grades based on each student's own abilities (Reddig et al., 2020). Even though many of the educators currently in the classroom were not teaching prior to this, many still have difficulty assigning grades to students with intellectual disabilities. One of the biggest hurdles for mainstream teachers is assigning grades to a student with intellectual disabilities that give a clear picture of the student's comprehension of the content while considering their individual abilities. There is a gap in the current research that neglects to determine the nature of teachers' inclusive teaching practices and their knowledge of culturally responsive teaching.

When investigating effective grading practices, it is important to understand that across the United States, teachers have been combining content and learning behaviors into one letter grade for more than a century (Lehman et al., 2018). This has led to a recent shift, with many schools adopting a standards-based grading system. A standards-based grading system gives a

clearer picture of what the student comprehends. It assigns two separate grades - one to content understanding and the other to assess the student's behavior and attributes.

While it is well established that grading is one of a teacher's prominent challenges, the messages grades convey must also be taken into consideration (Lehman et al., 2018). It is well known that a student's age can play a major role in their abilities in the lower elementary grades. Additionally, there can be significant differences in a student's ability even if they are just half a year older than their peers. For that reason, many teachers in the lower grades do not even want to put up a birthday bulletin board because they do not want to prejudge a student by their age. At the same time, it is not far beyond those younger school years that students realize their abilities are being assessed and compared to their peers. Similarly, any students who receive special education services consistently hear messages that point out everything they are unable to accomplish. There needs to be a clearer understanding of what grades mean to that population of students.

Finally, although there is a plethora of information available on how special education teachers can help cultivate a working relationship with general education teachers to ensure the student's needs are met, not much research can be found on how to best assess a student in the mainstream classroom based on their abilities. If the school has adopted a standards-based approach to grading, it may be difficult for many students who are intellectually disabled to comprehend the grade-level learning standards. At the same time, many rural schools do not have the ability to offer a wide variety of remedial courses that provide mainstream content instruction. For this reason, smaller schools would need a systematic approach as to what content and standards to use when assessing those students.

Guiding Research Question

The guiding research question for this thesis is:

- 1) How can teachers support and motivate students with intellectual disabilities by implementing grading practices that reflect students' academic and behavioral growth in a mainstreamed classroom?

Points to consider to help with researching this question:

While researching this question, it is imperative to explore three components of grading. First, it is crucial to explore current grading practices that teachers use to gauge students' academic and behavioral progress. Second, it is important to understand what those grades mean and what messages they are conveying to students and families. Third, it will explore how mainstream and special education teachers can implement grading strategies that reflect those students with intellectual disabilities' current abilities and growth while not comparing them to their non-disabled peers. Finally, this thesis will explore the processes involved to effectively reflect the progress and abilities of students with intellectual disabilities in the mainstream classroom.

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

Information and peer-reviewed research articles for this thesis were obtained from searches of databases that include ERIC (EBSCO), EBSCOhost, PsycINFO (EBSCO), Academic Search Premier (EBSCO), and Sage Premier between the years 1982 - present. Search topics included “effective grading practices,” “effective grading practices for students with intellectual disabilities,” “traditional-based grading,” “standards-based grading,” “grading students who are mainstreamed,” “Board of Education vs. Rowley,” “psychological effects of having a low IQ,” “depression in students because of their intellectual disability,” “depression and intellectually disabled,” “do students with disabilities compare themselves with peers,” “how grades affect students with disabilities,” “implications of grading students with intellectual disabilities,” “students with intellectual disabilities and peer comparison,” “problems associated with grading students with special needs,” “self-concept, attribution, and persistence in learning-disabled students,” “grade motivation and the student with learning disabilities,” “teacher collaboration for grading,” “modifying grades,” “what grades reflect,” “grading reform,” “processes involved to change grading systems,” “grading rubrics for intellectually disabled students,” “how administration can help with grading reform,” “universal grading,” “problems with grading diverse students,” “at what age do intellectually disabled children compare to peers,” “perceptions of disability,” and “when modifications and accommodations are not utilized”. Included in this chapter is a review of the literature in the following order: grading practices utilized in classrooms, effective grading practices, grading students with intellectual disabilities, messages grades reflect and communicate to intellectually disabled students, psychological

effects that may be associated with ineffective grading practices, motivation through effective grading practices, processes involved in grading students with intellectual disabilities, peer collaboration and challenges, and guidance from administrators.

Grading Practices

While there are no universal grading standards for high school students in the United States, it is important to have a clear understanding of the grading practices used. Link and Guskey (2022) explored if standards-based grading was effective. They examined two pertinent questions in this article: defining the specific criteria necessary for judging the effectiveness of any grading system, and determining how well standards-based grading meets that criterion (Link & Guskey, 2022). Link and Guskey (2022) indicated that the primary purpose of standards-based grading is to communicate accurately what the students can do and what they have learned rather than mixing academic and behavioral factors together in an accumulation of points. Standards-based grading, when successfully implemented, should provide a more accurate picture of the students' abilities compared to the grade and subject standards rather than their peers. It provides all the stakeholders with a clear picture of the student's understanding of the standards being taught. Instead of gathering data from every assignment, quizzes, projects, and assessments, the grading system is simplified into the state standards, and the students are only assessed on their knowledge of that standard. Assignments become practice and allow the teachers to give meaningful feedback to help guide the students in understanding the standards being taught while behavior and non-academic attributes are graded separately.

Link and Guskey (2022) further explained that the traditional grading systems used for centuries does not convey a clear picture of the students' understanding of the learning standards.

Traditional-based grading assigns one grade that encompasses all of assignments, assessments, and includes non-cognitive factors such as behavior whereas standards-based grading breaks down that process into clearly defined standards that are expected to be mastered in that grade and subject (Link & Gustey, 2022). While no grading system improves student learning, grading can reflect a student's understanding of each learning standard more accurately. Standards-based grading provides students with a simplified objective of the learning goals, leaving no room for misinterpretations. And if used correctly, it provides students with more meaningful feedback on their progress towards mastering the standards. It also provides teachers with simplified assessment objectives and no need to include previously learned standards or non standards questions in the assessments. In order for teachers to effectively utilize standards-based grading, they first need to plan out the curriculum standards to determine what students will be learning and when they will be learning. Although this simplifies the teaching process with the emphasis on learning standards, standards-based grading should be the last component implemented, giving teachers enough time to complete their curriculum and planning. Once standards-based grading is implemented, it meets all of the criteria to successfully communicate a student's learning while also giving teachers a more effective way to interpret their student's needs and successes.

Much like Link and Guskey (2022) reported in their research, Lehman et al. (2018) explored the relationship between standards-based grading and traditional-based grading in comparison to standardized state test scores. They concluded that the standards-based grading matched the scores of the standardized test more accurately (Lehman et al., 2018). The study was able to locate a school district that included one school that had already implemented standards-

based grading with about 500 students and the remaining middle schools with about 1,900 students that implemented traditional-based grading. This non-experimental, causal-comparative, ex-post facto research was designed to compare which grading practice more accurately expressed the student's academic ability. While the study was completed earlier than the Link and Guskey (2022) study, it also concluded that grading the student's academic performance on the grade level standards is a more accurate representation of the student's comprehension of the lesson standards.

The study demonstrated that the subjectivity of traditional grading systems that combine both academic and effort does not give a consistent representation of the student's comprehension of the content (Lehman et al., 2018). The article additionally stressed that when the grading system places academic and non-academic in different categories, it also can reflect behavioral concerns more concisely. Whereas, with traditional grading the subjectiveness leads to inconsistent representations of what the student comprehends and gives no information about the students behavior or other attributes. While this study only looked at math scores, the study suggested looking at other subject areas and larger populations in wider geographic regions. In the end, Lehman et al. (2018) concluded that if schools continue to use traditional grading systems, the grades will continue to ineffectively convey the student's achievement and understanding of the math standards.

Grading Students with Intellectual Disabilities

In yet another article, Guskey and Jung (2009) explored the positives that standards-based grading can provide by delivering a more precise learning gauge for students with special needs. The authors described how teachers have struggled to assign accurate yet fair grades to their students who have special needs (Guskey & Jung, 2009). The Individuals With Disabilities Act (IDEA) of both 1997 and 2004 requires Individualized Education Program (IEP) teams to plan, document, and report on the progress of students with disabilities. When a teacher or school implements standards-based grading, it provides the IEP team with the necessary information to see exactly what that student understands and the areas where the student might need more assistance. Guskey and Jung (2009) went on to indicate that the number of students with disabilities who are mainstreamed has steadily increased and that educators need to have an effective grading system that reflects their progress in the classroom. Typically, the general education teacher assigns the grades for the mainstream courses, while the special education teacher monitors the student's IEP goals and objectives. The problem lies with the general education teacher having to determine an appropriate grade for general education content for a student affected by a disability. In addition, IEPs must "enable the child to achieve passing marks and advance from grade to grade" (*Board of Education v. Rowley*, 1982, p. 4). With a traditional-based grading system, it is difficult to determine how to grade a student who has yet to master a standard. Yet, failing a student with disabilities indicates that fair and appropriate educational services were not provided. Whereas with standards-based grading, the standards are individually listed and graded, so a teacher can effectively show the student's understanding of each standard.

Additionally, if the situation calls for it, the standards can be modified to the student's ability while still challenging the student.

Guskey and Jung (2009) have provided a multistep flow chart to determine if the standard is within the student's ability to master, or if the student will need modified standards to be more effectively graded on their ability. This inclusive grading model provides teachers a guide to develop the level of standards that the special needs student will require in the mainstream classroom (Guskey & Jung, 2009).

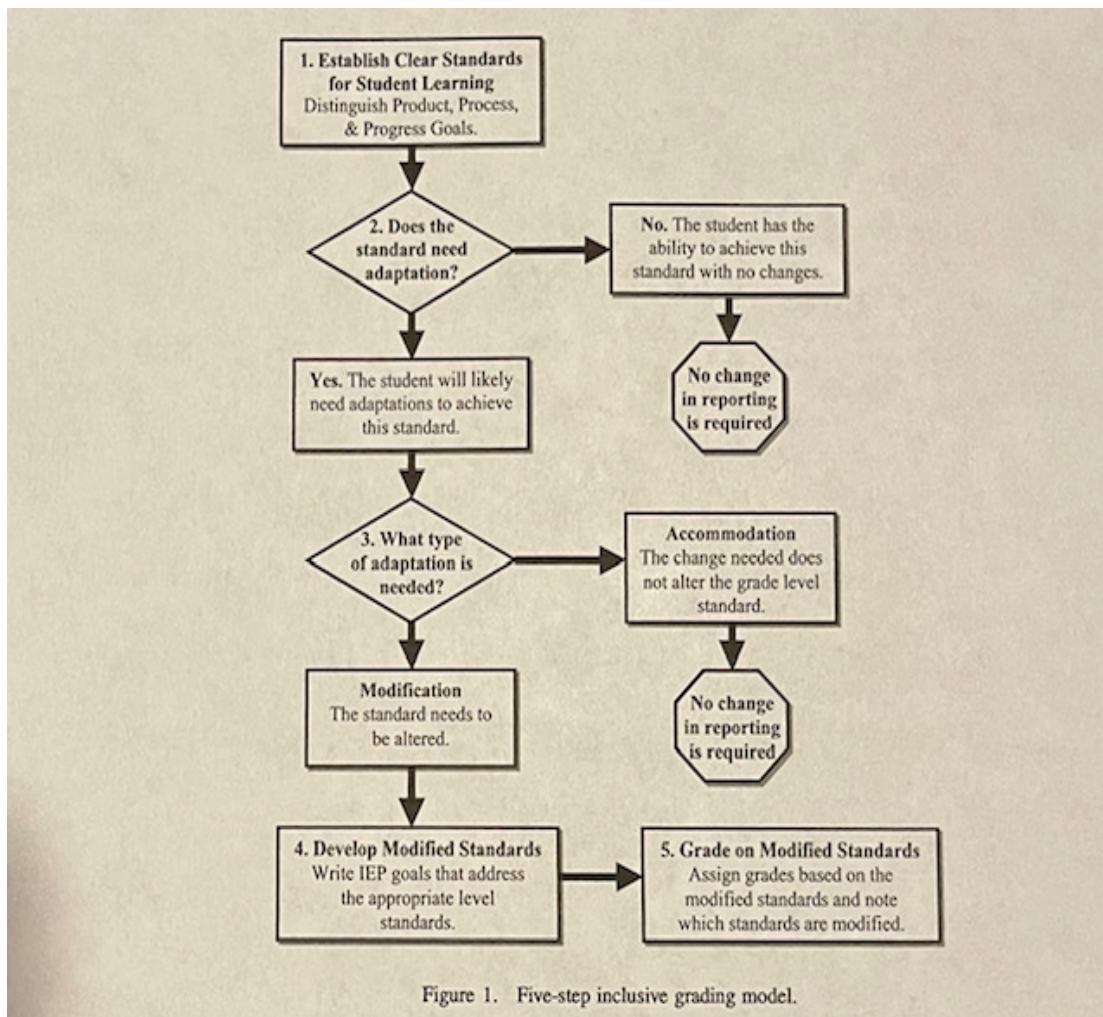
Figure 1*Five-Step Inclusive Grading Model*

Figure 1. Five-step inclusive grading model.

Figure 1. Five-step inclusive grading model. From "Grading and reporting in standards-based environments: Implications for students with special needs," by T.R. Guskey and L.A. Jung, 2009. *Theory Into Practice*, 48:1, p.57. (No copyright information available)

Both the special education teacher and the general education teacher should work closely in determining which route may be needed for the student. One route may include accommodations, while another may include modified standards. The article also calls attention to the special needs students who may be in a mainstream classroom working on additional IEP goals that may include non-academic goals such as social or functional skills. Students with intellectual disabilities and delays may have social-emotional goals, and being in the classroom with their peers is the only place where they may effectively practice those goals. Even though those types of goals are not included on a standards-based report card, because the behaviors and attributes are graded separately, those students will be graded fairer with a standards-based grading system as opposed to a traditional grading system.

All three articles summarized and explained different aspects of the standards-grading system and compared it to the traditional grading system that many schools still utilize today to grade students. While it is difficult to locate even one article on traditional-based grading, the overwhelming reason schools continue to use it is that many post-secondary education institutions still require a grade point average. Yet, traditional-based grading often includes subjective points given for things such as extra-credit, behavior, grading on a curve, using zeros as a punishment, and incorporates teacher expectations and judgments into grading (Lehman et al., 2018). While each article looked at standards-based grading differently, all three articles showed how standards-based grading is a more accurate representation of a student's understanding of the lesson standard. It is important to note that the Link and Guskey (2020) article did take a more general look into standards-based grading that could be used in every classroom, as suggested by the Lehman et al. (2018) article, where they specifically compared

assigned math grades to the same students' standardized test scores (Link & Guskey, 2022) (Lehman et al., 2018). Furthermore, Guskey and Jung (2009) singled out how standards-based grading could be a more accurate measurement for special education students in the general education classroom. A standards-based grading system benefits special education students by having their behavior and other attributes assessed separately, giving the whole IEP team a better picture of what is happening in the classroom, i.e. academically or behaviorally. All three articles concluded that one of the benefits of standards-based grading is that it separates academic achievement from behavioral achievement, and the students are graded solely based on their understanding of the standards being taught.

Messages Grades Reflect and Communicate to Intellectually Disabled Students

Whether a student is graded by traditional grading or standards-based grading, grades evoke feelings. For a student with intellectual disabilities who has been told for years that they do not measure up to their peers, a bad grade on a report card may validate their feelings of inadequacy. Just like teachers would never grade a student in a wheelchair on how fast they can run up the stairs, educators need to recognize that students with unseen disabilities, which may include intellectual disabilities, cannot be compared to their non-disabled peers and should not be graded on the same attributes.

Grades have many purposes for many different stakeholders. As laid out in the article by Hendrickson and Gable (1997), it is important to realize that grades can convey different messages and purposes for each stakeholder. For the administrators, councilors, teachers, families, students, and future employers, grades provide feedback on the student's understanding of the content (Hendrickson & Gable, 1997). For students, grades can provide messages that

include progress monitoring and documentation of achievement and mastery, reinforce a sense of motivation, provide realistic self-appraisal data, test performance for real-life opportunities, and help with short and long-term goals.

Psychological Effects That May Be Associated with Ineffective Grading

Many articles have been written exploring the psychological well-being of special education students and how different settings can contribute to their sense of self. Alarming, many of these articles point to increased depression and anxiety in addition to lower self-esteem among students who have learning disabilities. Childhood depression and anxiety are strongly linked to an increased risk of mental health disorders as these children age and enter adulthood (Whitney et al., 2018). Furthermore, children identified with neurodevelopment disabilities are at an increased risk of mental health disorders. About 12 children in 1000 are currently identified with neurodevelopment disabilities (Maenner et al., 2016). Whitney et al. (2018) explored factors associated with depression and anxiety in this population of students. Some of the factors associated were bully victimization in addition to pain and their specific disabilities that included Autism Spectrum Disorder (ASD), Attention Deficit and Hyperactivity Disorders (ADHD), and Down Syndrome (Whitney et al., 2018). Their methods of determining factors associated with depression and anxiety in these groups of children included utilizing the data from the 2016 National Survey of Children's Health (NSCH), which included a two phase survey to gather data about children ages 0-17, and their families and communities. 40.7% of the more than 360,000 surveys sent out were completed, and this percentage was additionally compared to the U. S. Census Bureau conducted the same year, giving the survey robust data to explore. Whitney et al. (2018) chose to restrict the sample size to include children only in the age group of 6-17 years

old, including 423 children with Intellectual disabilities (ID). The survey questions included “Has a doctor or other health care provider EVER told you that this child has a [specified] disorder?” (p. 410), and then the study included those surveys that reported a current diagnosis of depression or anxiety. In addition, the study also included breakdowns of sociodemographics, severity of intellectual disabilities, physical factors, and social factors. The results of the study concluded that the combined prevalence of depression and/or anxiety problems was 35.4%, and using just the data from the students identified as ASD and ADHD, the percentage increased. The contributing factors to the higher increase in prevalence were pain and bully victimization, and notably those identified as Hispanic or with Down’s syndrome had lower cases of depression or anxiety. The data, however, still supported the hypothesis of the greater prevalence of depression and anxiety in children with intellectual disabilities as compared to those children without intellectual disabilities. While this article did not explore grades as a contributing factor, the bullying victimization was explored, and all the children in the study were school-aged, inferring that the bullying was happening most likely at the school settings.

Maag and Reid (2006) also explored the incidence of students with intellectual disabilities having higher scores on depression when compared to their non-disabled counterparts. Similarly, Whitney et al. (2018) found that students with learning disabilities had significantly higher rates of depression than students without learning disabilities (Maag & Reid, 2006). In this article, they utilized a quantitative research synthesis and meta-analysis to effectively review the literature available and report the summarized findings. They concluded that through the 14 different studies, including 1,701 students, the students with learning disabilities had a significantly higher rate of depression than their peers without learning

disabilities. In the article, they called attention to students spending more time in a school setting than in any other environment outside the home, and that students' behaviors, relationships, ability to cope, and academic performance are all contributors to a student's mental health. They also revisited the subject of an article they wrote together in 1994, where they identified that approximately 2% of the students with learning disabilities actually experienced severe symptoms of depression (Maag & Reid, 1994). In that article, they tested 95 secondary students with learning disabilities and 126 non-disabled students. They found that in both groups, the depression rate was at 10%, of which 2% in the learning disabled group experienced severe depression symptoms. Using sub-scales of the Self-Esteem Inventory and Adolescent Drinking Index proved to be consistent with predicting the depression percentage in this study.

Another article explored the well-being of mainstream students with intellectual disabilities and concluded that many of them are able to maintain their identities and optimism. Even so, there is a serious concern and need for schools to provide emotional well-being to these students because of higher incidences of mental health illnesses in students with intellectual disabilities (Cooney et al., 2006). They utilized the data gathered from 60 students with mild to moderate intellectual disabilities in their final year of secondary education. Of these 60 students, 28 attended mainstream schools, and 32 attended schools for disabled students. The study hypothesized that very little has been explored about the impacts of mainstreaming and how it affects their views of self and social comparisons. The study recognized that students with intellectual disabilities often can be stigmatized in either of the school settings. The study used a between-subjects design with children from western Scotland. Teachers were contacted and asked about students who fit the criteria: 15-17 years old, likely to leave school at the end of the

year, and identified with mild to moderate intellectual disabilities. The study did not include students identified as fitting the criteria for ASD, speech or language difficulties, or severe physical and/or sensory impairments. The students were then interviewed in person, and in addition to the questions, the students were also measured on their receptive vocabulary using the British Picture Vocabulary Scale-Revised, similar to the Wechsler Adult Intelligence Scale-Revised, and the Adapted Social Comparison Scale, Modified Life in School Checklist, Experience of Stigma Checklist, and the Future Aspirations Checklist.

It was hypothesized that the students in the mainstream group would score higher in experiences of stigmatized treatment, and this study was found to be accurate (Cooney et al., 2006). The students who were mainstreamed reported more instances of ridicule and exclusion by non-disabled peers. The data reported on the social comparison with peers who have a more severe intellectual disability, and the study indicated that the disabled students viewed themselves more positively. Likewise, the study found that disabled students compared themselves to their non-disabled peers in a more negative light, specifically on achievement and social attractiveness. Lastly, when exploring the future aspirations of each group, it was hypothesized that the mainstreamed group would score higher on their belief that they would be successful, and the study found there to be no significant difference between the two groups of students. Most of the students reported future aspirations of living independently and actively working. The most concerning thing that this study observed was the level of discrimination reported by those who attend a mainstream school and the perceived problems with support and staff with their learning disabilities and needs.

Similarly, McMahon et al. (2006) found that a student's interpretation of school belonging played a significant role in their psychological well-being. This article examined students with intellectual disabilities who were recently transferred to new schools because of school closures. Testing the relationships of school stressors and resources, school belonging, academic outcomes, and psychological outcomes, the article concluded that school belonging had much to do with both academic and psychological outcomes in students who have an intellectual disability (McMahon et al., 2006). The study involved 136 students in the Chicago area in grades 5th through 12th who were moved from a school for students with disabilities into mainstream schools. The median age of the students was 17, and included ages 11-20 in the study, and their intellectual disabilities included mild, moderate, and severe. Using the Life Stressors and Social Resources Inventory-Adolescent Version, Psychological Sense of School Membership Scale, the Academic Self-Efficacy Scale, the seven-item Anxiety Scale, and the 10-item Children's Depression Inventory-Short Form, they were able to glean an association between the effect of grades and anxiety. Interestingly, the students of middle school age reported higher anxiety than those who were high school age. The link between school stressors and resources had a direct impact on the students' sense of school belonging and was also associated with their school satisfaction and academic self-efficacy. As noted in the article, school belonging is strongly linked to academic engagement and motivation. When students feel welcome, they do better and feel better about themselves with less anxiety and depression. Teacher support and empathy also play into the students' perceptions of school belonging and can be either a stressor or a support. This study model brings attention to how important it is for inclusion to work, schools need to

spread awareness about students with disabilities and promote school-wide efforts to increase school connectedness and belonging for all students.

Unlike McMahon et al. (2006), the Huck et al. (2010) study concluded that students with intellectual disabilities who were included in mainstream classes remained positive when their self-concept was more prevalently negative than their non-disabled peers. It should be noted that this study included students of younger ages than the previous studies examined in this thesis. This article included three specific questions: “How do the children with intellectual disability in this sample perceive their competence and acceptance, and does this change with the age of the children?” “How do the perceived cognitive competence and perceived peer acceptance of the children with intellectual disability included in this study compare with their academic performance and social status as rated by teachers and peers?” and “How does the self-concept of the children with intellectual disability included in this sample compare with the self-concept of the individuals with and without intellectual disability as reported in the literature?” (Huck et al., 2010, (p. 145). They tested these questions with 11 boys and 6 girls between the ages of 7 and 11, who were also included in a separate study tracking preschoolers. All the students were identified as having intellectual disabilities, and the group used the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA), academic work produced by the students, and work produced by non-disabled peers. While the students’ perception of cognitive competence was very positive, their samples were far below that of their peers. In fact, of the 17 students in the study, only one perceived their competence as low. But, every one of the students perceived their peer acceptance as high, which was considered to be a unique finding at this recent time.

Even though there have been many reviews on the effects of inclusion since the 1980s, when mainstream classes began to be more prevalent, the results have been inconsistent in determining that inclusion is better than segregated education for students who have special needs (Dalgaard et al., 2022). It would seem that perhaps the problem lies in the challenges in the study designs present methodological challenges and weak outcomes. This article explored data from recent studies to examine the effects of inclusion on students' socio-emotional development and well-being through a meta-analysis method. They explored how different moderators, such as gender, age, severity of needs, and amount of time spent in mainstream settings, related to students' well-being. This literature review included articles published from 2020 through September 2021, although the studies included in these articles had an average date of 2006 and included the timeframe of 1998 through 2012. There were 94 studies included in the review that were all completed in 19 countries that belong to the Organization for Economic Co-operation and Development (OECD), which includes the United States, and the majority of the articles were derived from the United States. The review did favor inclusion, although with caution, as it was concluded that there was not enough evidence to clearly define which setting was better for students' well-being. Through this meta-analysis dive into the data, this article additionally concluded that although the theoretical hypothesis is that inclusion decreases stigma and social isolation, there is no evidence that effects from inclusion may present themselves in adulthood.

Motivation Through Effective Grading Practices

If grades are to be used as a motivational tool to help students get more excited about their learning and capabilities, there needs to be a better understanding of what the grades are measuring. In an article that was not peer-reviewed, Mary Calhoun explored how grades are

interpreted by both handicapped and non-handicapped students (Calhoun, 1986). In her pre-evaluation of what she was measuring, she cited a previous study by Calhoun and Beattie (1984) that found that fairness in grading practices for students with disabilities resulted in many students failing classes or being given a “gentleman’s D” for effort, a practice still being exercised four decades later. In her study, she found there were significant differences in how these two groups interpreted the grades assigned to them. Through interviews with 10 special education students and 10 students who do not receive or qualify for special education, she found that grades are not an effective communication tool for students with disabilities.

Overwhelmingly, the students without disabilities understood the need for differentiated learning and grading practices for their disabled peers. She goes on to state that there is a clear need for grading practices to change to better communicate the progress of students with disabilities.

Deutsch, cited in Engelberg and Evans (1986) and again in Shelby and Murphy (1992), claimed that letter grades are “the basic currency of our education system” (p. 91). Indeed, grades have been a driving force for students who aspire to post-secondary education and to parents who gauge their student’s academic knowledge, but in many instances, grades are not effectively gauging progress for our students with intellectual disabilities. Students in this category are left with a sense of helplessness because higher grades are not within their reach, and they feel personally responsible for this (Shelby & Murphy, 1992). Special education teachers are well versed in learned helplessness as it is prevalent in many of the students who receive special education services, and yet, decades into mainstream education, we are still failing students with disabilities, which contributes to learned helplessness. Shelby and Murphy (1992) researched a group that included students in sixth and eighth grades, both non-disabled

and disabled, and their parents and teachers using data gathered through interviews and questionnaires. They found that teachers were struggling with how to grade their students, some mainstream teachers using the modified program to drive the grade, while others were still grading these students using the same criteria as the regular education students. Students with intellectual disabilities tended to feel a lack of academic encouragement from their efforts and did not value the grades assigned to them. When these students were graded on the same criteria as their peers, they had feelings of helplessness and felt little motivation, as they assumed they were solely responsible for their poor academic achievement, no matter how much they tried to do better. This study concluded that care must be taken to build confidence in these students and that it should be a partnership between the teachers, the parents, and the students to determine the common goals and clarify how to effectively measure those goals in the general education classroom.

Like Shelby and Murphy (1992) stated, parents are a large contributor to believing that the grading systems they grew up with should be consistent with the grading systems used today. However, when broken down into parents of students without intellectual disabilities and parents of students with learning disabilities, there is a stark contrast between those beliefs. Parents of students without disabilities tend to perceive grades as an important factor in communicating information to post-secondary institutions as well as future employers (Munk & Bursuck, 2001). In this article, parents of students with disabilities stressed the importance of grades as a communication of their child's individual strengths and weaknesses and not as necessary for post-secondary life. Monk and Bursuck (2001) researched 10 potential purposes for report card grading, with motivation listed as the third most important purpose of grades. Using a mid-sized

high school located in the Midwest, they sent out surveys to 23% of the total student body households, and of this, a total of 163 surveys were returned, but six were disqualified. The breakdown of total surveys included parents' input and consisted of the following classifications of their child: high achieving (39%), average achieving (11%), low achieving (29%), and special education (20%). The two-page survey included a description of the 10 possible purposes for report card grades, which were chosen from relevant literature on the subject. Out of those 10 possible purposes, parents ranked communication of general achievement and quality of work on the high school curriculum highest, followed by communication of your child's effort and work habits, and motivation for your child to keep working. The parents of non-disabled students ranked communication of progress on individual goals or mastery of specific content as well, and the parents of students with disabilities ranked grades should provide information to teachers about which students may need special help or additional programs. Unfortunately, the survey did not gather information on specific recommendations for individualizing the grading process, but most parents felt that grades are only somewhat effective at measuring this. It should be noted that many of the parents of disabled students responded to the survey because of overall frustration with what the grading system is measuring. The study mentions the need for discussions with teachers, parents, and students prior to grading periods for students who are disabled to determine what the students will be graded on in mainstream classes.

Another article explored the importance of intrinsic motivation, which is strongly associated with students' academic success, and how students with learning disabilities are many times less likely to have this self-motivation (Dev, 1998). Students who understand that their success is directly related to their effort probably have intrinsic motivation. However, if they put

forth large amounts of effort, with little acknowledgment reflected in their grades, these students will lack intrinsic motivation. These learning-disabled students then rely on their teachers for motivation, often in the form of extrinsic motivation, where they are rewarded just because they completed a task. Not that extrinsic motivation is bad, because many jobs would fit into this category, but intrinsic motivation can improve academic performance greatly and may aid in a student enhancing their curiosity and learning. In this article, Dev (1998) explored 14 research studies completed between 1974 and 1996 that met the criteria. Of these, half of them researched intrinsic motivation that included students with learning disabilities, and the other half included studies on assessment procedures. Dev (1998) concluded that based on his research review, not only are students with learning disabilities more successful if they have intrinsic motivation, but also that these students' self-competency is directly related to academic intrinsic motivation. He went on to indicate that any interventions for students with learning disabilities who do not include a motivational component will probably not be successful.

Intrinsic motivation is an integral component of learning, and in a study that explored academic motivation, academic self-efficacy, and well-being with students with learning disabilities, it was revealed that intrinsic academic motivation is important for successful academics (Kausik & Hussain, 2021). In fact, this study included students with learning disabilities who attended inclusive schools, students attending special schools, and students without learning disabilities. The severity of the learning disabilities was not included in the study, but of the 222 students in the sample, 72 attended a special school for disabilities, 75 of the students with disabilities attended inclusive schools, and 75 of the students had no learning disabilities. The study took place in various schools in two metropolitan areas in India and had

three different measurement scales. These assessments included the Self-Regulation Questionnaire-Academic, with a Likert-type scale, a Children's Self-Efficacy Scale, and the Personal Wellbeing Index (PWI)-School Children. The results from the study showed that overall, students with disabilities in inclusive schools scored higher in motivation, while the students in special schools scored the lowest in this category. As for self-efficacy, there was no significant difference between the students with disabilities in either placement, inclusive or special schools. As for the students' well-being, the students without disabilities scored significantly higher than the other two groups of students, with no difference between the students with disabilities in either setting. Conclusions included that students with learning disabilities have a higher probability of having lower levels of intrinsic motivation and that focus interventions for these students should include motivation concerns over remedial education. In addition, the conclusions recapture that intrinsic motivation is necessary for academic achievement. Low intrinsic motivation usually results in lower motivation to master skills and goals. If the goal is to create healthy contributors to the community, their academic journey needs to be more comfortable and conducive to their needs, and this takes effort by all the stakeholders in a child's education.

Processes Involved to Grade Students With Intellectual Disabilities

The processes involved in ensuring that students with intellectual disabilities are graded effectively require an open mind and the ability to not rely on a computer-generated grade that includes both learning standards and other attributes and behaviors. As stated earlier in this thesis, traditional-based grading is an ineffective way of grading students, and although it is mentioned in many peer-reviewed articles, this researcher was unable to find any articles that

supported traditional-based grading. It is outdated, having been used for nearly a century, and does not measure the knowledge of the standards taught in the classroom. On the other hand, standards-based grading has been around and examined since before mainstream education took off in the early 1990s. In an article by Thomas Guskey that was not peer-reviewed, he explored the five obstacles to grading reform (Guskey, 2011). The first obstacle is that grades should provide the basis for differentiation offered to the students. He points out in this obstacle that teachers are supposed to be developing talent instead of selecting it. Hopefully, the teachers want to develop talent instead of selecting it, and therefore, providing students with clear goals of what they want them to learn. If successful, there should be little to no variation in the measurements of students' learning. The second obstacle is that teachers believe that grade distribution should resemble a bell curve. The reasoning behind this is directly related to intelligence, and just like farmers adding fertilizer to their fields to help them all produce higher yields, teachers need to be purposeful in their interventions to provide each student with the support they need to learn the objectives. Obstacle three indicated that grading should be based on the students' standings among peers. This provides the stakeholders with no information as to how many students know the lesson standards or how well they learned them. Grading criteria should be both challenging and transparent, not based on how the rest of the class progresses. Obstacle three revealed that poor grades motivate students to try harder, and as stated many times in the previous section, ineffective grading does not motivate students with intellectual disabilities, let alone any other student. There is no research that advocates this idea, and even more so, poor grades prompt students from trying at all, as in learned helplessness. And finally, obstacle five is the old belief that students should only receive one grade for each course.

Combining the many different considerations, academic and behavior, in how the students are graded does not provide the teacher or any of the stakeholders with the information necessary to reflect what the student understands about the lesson standards. Combining a student's attitude, effort, responsibility, behavior, and achievement in one grade distorts any usable information. The fallacy that requiring multiple grades per subject contributes to the teachers' workload is false, and actually separating the attributions from the standards gives a much clearer picture of where supports are needed for each student and is a much more effective way to measure if the teachers' lessons on the standards are effective. It does this by measuring the process, progress, and product produced and will require teachers to plan how they will evaluate the other attributes, but once this is done, the process of grading should be time efficient.

Guskey's previous article was a take on his theme in a peer-reviewed article on how to help the standards to drive the grade that he published 10 years prior (Guskey, 2001). He broke down the different criterion standards, their histories, and their effectiveness through a literature review. In this article, he predicted that standards-based grading would revolutionize the old traditional-based grading by giving more specific criteria for assessing each student. He made similar suggestions, pointing out that on the front end, it will probably be more work for the teachers to define the standards, how they are going to assess the students' other attributes, and to convey the meaning of this new grading system to the parents and students. Many parents grew up understanding the traditional grading systems in place and want to know how their child is really doing compared to their peers. Still, if done effectively, standards-based grading can provide information about whether the student is expected to meet the understanding of the standards by the end of the year. Instead of using A-Fs as the grades, standards-based grading can

use 4, 3, 2, and 1 as a scale with plus' and minus' to report how a student is progressing in the knowledge and understanding of the standards. Guskey indicated that many parents find it difficult to understand why their students do not receive all 4s at the beginning of the year when really the scales would allow room for the students to grow in their understanding.

Other necessary components when developing the processes of grading would be to explore what students with intellectual disabilities and their non-disabled peers think about the grading processes. In a synthesis study that included 20 studies that investigated the perceptions of a total of 4,659 students in grades kindergarten through 12th grade, including 760 students with disabilities, the results showed that students want both to be compared to their peers and yet have individual grading systems in place (Klingner & Vaughn, 1999). Kids want to be kids and want to be like their friends, but when it came down to it, most of the students with disabilities wanted to know how they were progressing and their grades to reflect what they learned. Although the study is almost 25 years old, the student's concerns are similar to what previous studies in this thesis concluded. Students want to be graded fairly, and modifying a grading system for those students who need it is welcomed by most of the students in the studies. The study's synthesis concluded that students think of grades as feedback. The students with disabilities think that perhaps assigning two grades, one for performance and one for effort, might be fair, and even giving some students higher grades when they show improvement. They also felt that being graded on a different scale would be fair. And yet, all the groups rated modified grades as unfair. The conclusion stated that students have distinct ideas on ways they would benefit from adaptations and accommodations and that their voices should be heard in any discussions about grading.

Donahoe and Zigmond (1990), cited by Munk and Bursuck (2017), found that 60-70% of students with learning disabilities passed their mainstreamed courses with below a C- average. Although many other research studies have shown this is a common phenomenon under traditional grading systems, grading adaptations for these students may be the answer. This article explores the issues of grading adaptations and procedures for personalized grading plans for students with disabilities. As of 2017, when the article was written, a survey showed that 65% of the districts across the nation had written grading policies, and 60% of those had developed guidelines for adapting grades for students with disabilities. Some of these adaptations include the following: varying the weight of assignments, modifying curriculum, developing individualized contracts with students, and grading on improvement. Other adaptations included adding written comments, adding information from student activity logs, adding information from portfolios/performance-based assessments, using pass/fail grades, and using a competency checklist. The overall motivation for making grading adaptations is to create a better form of feedback for the parents, students, and school. While many of these adaptations and modifications can be included on a student's IEP, there is still considerable confusion among many general educators on how to effectively implement these in their classrooms. But, even with great teacher collaboration between the special education teacher and the general education teacher, there is no criterion on how to most effectively accomplish the grading that these students deserve. So Munk & Bursuck (p. 7) designed an eight-step process in:

Figure 2*Protocol for Implementing a Grading Adaptation*

Step 1: Clarify teacher purposes for grades (i.e., the information the grade should convey).

Step 2: Clarify parent and student purposes for grades (i.e., information parents and students want to receive).

Step 3: Arrive at mutually agreed-upon purposes for grades.

Step 4: Examine student learning characteristics (achievement level, impact of disability, areas of strength, limitations) and classroom demands that will contribute to the student's grade. Identify potential grading problems (learner characteristics interacting with class requirements and grading system).

Step 5: Review the current grading system and determine if the grade could be higher and /or more meaningful if a grading adaptation was implemented.

Step 6: Select an adaptation that meets agreed-upon purposes and addresses the grading problems identified previously.

Step 7: Document the adaptation in the IEP and begin implementation.

Step 8: Monitor the effectiveness of the adaptation (i.e., does it meet the purposes identified?).

Figure 2. Protocol for Implementing a Grading Adaptation. From: "Personalized grading plans: A systematic approach to making the grades of included students more accurate and meaningful," by D. D. Munk and W. D. Bursuck, 2017. *Focus on Exceptional Children*, 36:9, p. 7. (No copyright information available)

Making grading adaptations is nothing new; however, to have school or district-wide fidelity, especially with more and more students mainstreamed, it needs to be more systematically planned out to work effectively. Using the flowchart system above can help teachers and schools with the start of that. In a 2002 article that also zeros in on grading adaptations, the authors stress that the Attribution Theory, or perceived causes, affects the outcomes for future motivation of students with disabilities, and grades make the difference for many of these students (Ring & Reetz, 2002). They indicated that much of what these students have experienced in the form of grades, they attribute their failures to their own inabilities, and there needs to be a change so these students can aspire to exceed expectations.

When it comes to homework, grading, and testing practices, sometimes the biggest weakness is the lack of adequate training and ongoing professional development that teachers receive in the area of special education students. In an article dated 1995, only 25% of the 1,324 middle, junior, and high school general education teachers surveyed had taken special education courses that focused on adapting materials for students with disabilities (Struyk et al., 1995). In this article, they surveyed teachers taken from a list of 15,713 teachers from the U.S. Department of Education Index, then selected a stratified random sample of school districts ensuring that the nine census regions were included. From that, they randomly chose three schools within each of the 650 districts asking principals to pass on the survey to three teachers who have students with disabilities in their general education classrooms for a total of 5850 surveys. The results from this survey also noted that students with disabilities received 60% of their academic credits in general education classrooms. The study included three separate surveys covering teacher practices with homework, testing, and grading and had a mixture of formats; yes and no, open-

ended questions, and single-response questions. Struyk et al. (1995) developed a database using the Number Cruncher Statistical System, cited in Hintze (1990), where each of the response codes were generated for each of the variables. The results of the 394 teachers who returned the homework practices survey indicated that 6% assigned no homework, 13% assigned homework once a week, 70% assigned homework two to four times a week, and 11% assigned homework daily. This means that the students with disabilities could be expected to be assigned homework about half the days, and it would take the average peer 30-90 minutes to complete, keeping in mind that students usually have 4-5 academic courses, resulting in two to three hours of homework daily. This may be evidenced in the most recent article that found that only 26% of IEPs reflect grade-aligned academic goals, making it even more difficult for general education teachers to understand the whole picture of a special education student's learning responsibilities (Kurth et al., 2021). This is further complicated for many general education teachers who lack the understanding of an IEP, accommodations, and modifications (Pollard & Rojewski, 1993). Of the 352 teachers, most indicated that they modify the weights of various components differently for the students with disabilities as compared to their non-disabled peers (Kurth et al., 2021). This may look like tests and quizzes weighing 35% compared to 40% for the students without disabilities, and in-class work and homework at 25% instead of 30% for the students without disabilities. Teachers also indicated that utilizing checklists to indicate the level of their understanding of the content and skills, as well as comments, were the most helpful in reporting grades for the students with disabilities. Overall, teachers preferred number or letter grades over a pass-fail choice in grading students with disabilities. Lastly, of the 385 teachers who completed the testing surveys, 92% allowed the students with disabilities more time to complete the tests,

94% provided feedback to the students with disabilities during the test, and 96% allowed the students with disabilities to use their notes and open books on tests. This resonates with what (Saland, 1995) reported in his article about modifying tests for diverse learners. His article reads like a presentation of ideas of how teachers can incorporate accommodations and modifications into their classrooms, and especially their tests (Saland, 1995). He stressed the formatting of the tests as an important aspect and making sure that the same language used in the classroom is used in tests; i.e., don't use a test that calls mathematical processes something else from what you have referred to them in class.

Interestingly enough, a few years later, Munk and Bursuck (1998) released a short article that reported 73% of the teachers in a national survey reported that making report card adaptations only for students with disabilities was unfair. The data used for this article included 368 elementary and high school teachers who were surveyed in 1996, and 80% of those indicated that their schools require letter grades. Although the results could be construed as contradictory, many of the teachers indicated that these grading systems could be adapted for students with disabilities. They felt that the most important finding was that schools needed to explain grading adaptations to all of the students so there are no misunderstandings when their disabled peers might get an unexpected grade on a task.

Peer Collaboration and Challenges

If special education continues to include a greater number of students with disabilities in the mainstream classroom, the difficulty of grading these students who have significant needs in achieving and progressing as compared to their non-disabled peers hinges on collaboration (Polloway et al., 1996). These students who gain socially by being with their peers are still

dealing with low or failing grades, and if teachers want these students to be motivated, and continue to learn, they need to address how to effectively grade these students. As of this study, the grading outcomes have shown that students with disabilities' grades are significantly lower than those of their non-disabled peers. Collaboration between general education and special education teachers needs to be both fluid and frequent. Not only will there be better outcomes for these students by providing them and their families with a clear understanding of their child's achievements and efforts, but in addition to any accommodations and modifications included in the IEP, it will provide data if a change is needed. When students have a clearer understanding of their academic and behavioral growth broken down into separated grades, their attributions for success will also be positively affected (Ring & Reetz, 2002). A healthy classroom environment fosters healthy mental attributions and needs to be available for every student. When teachers use research that includes attribution theory, motivation, and learning along with effective teaching, they can accommodate students' needs and adapt the instruction and grading to give a clearer picture of students' academic and behavioral skills.

Polloway et al. (1996) went on to explain in their article that although there were few schools that reported having district policies, 40% of general education teachers at that time reported they had worked with the special education teachers when it came to grading practices. Their article breaks down the components of a grading system and offers suggestions in collaboration conversations and adaptations that can be implemented for students with learning disabilities. From homework to testing, adaptations can be implemented to both provide the students with their individual needs, as well as provide the teachers and stakeholders with the data needed to make future decisions about a student's support needs. When collaborators cover

all of these components in the conversation, it becomes easier to move forward, illuminating indecisiveness for the general education teacher when grading time arrives.

Federal legislation in the Individuals with Disabilities Education Act (IDEA) and the many studies on special education and teacher practices give educators the direction they need to provide students with disabilities an education that includes academic standards while shifting to an alternative grading system policy (Hendrikson & Gable, 1997). Much like Polloway et al., (1996) offered, Hendrikson and Gable (1997) also broke down components to the collaborative process to tackle necessary areas that the teachers need to identify as contributing to effective grading for students with disabilities. They placed IEP-driven grading at the helm of any grading strategy to be agreed upon and communicated clearly to all stakeholders. The IEP should include not only the accommodations and modifications but alternative grading information should also be in the IEP. This way, the conversation takes place at the IEP meeting and can cover questions and offer time to clarify what might be best for individual students. Not only this, but then it is clear to everyone involved what the grade signifies, and it is easier to reference the data for future use. Instead of norm-referenced or criterion-referenced choices, the grades could look like a self-referencing system based on the student's growth compared to their prior performances. The need for collaborative conversations that could turn into policy changes is not going away with the growing diversity of students in the classrooms. With consistent collaboration, schools can build it into policies that work.

One such suggestion of a simple flow chart used as a decision model is:

Determine district, state, and federal policies and guidelines regarding grading.



Identify your theoretical approach(es) to grading.



Identify your colleague's theoretical approach(es) to grading.



Cooperatively determine grading practices for individual students.

(Christiansen & Vogel, 1998, p. 32).

Although they go on to say that not many teachers are prepared to collaborate on a process for grading practices for disabled students included in the classrooms, and they point out that teachers need information and training in adaptations, the number of students with intellectual disabilities in the general education classrooms has been rising now for decades. In order to have these collaborative discussions, everyone involved needs to remove their personalities from the discussion, focus on the interests of the individual student, look to invent options for mutual gain, and, finally, develop objective criteria that include fair standards and procedures. Lastly, for any effective grading practice to work, it needs to be consistent with school policies, meet the communication needs of the grading process, reflect the theoretical beliefs of the teachers involved, and be consistent with IEP for the student.

When teachers work together to create either a Personalized Grading Plan (PGP) model, or another individual grading plan, the special education and general education teachers can

more effectively determine what grading adaptations should be included in the district grading system to produce a more accurate grade for these students (Silva et al., 2005). This not only ensures that a student is assigned a more accurate grade but also provides the stakeholders more accurate information needed to move forward with context planning and goals.

Guidance From Administrators

Great collaboration can be enhanced by guidance from the school administrators involved. They often have a seat at the table during IEP meetings and are an integral part of the IEP team. Including their expertise in collaboration can help facilitate a simple conversation, with insightful questions and answers for everyone involved. Administrators should be the leaders in determining what criteria and aids, such as flowcharts, make the most sense for teachers to be utilizing. There are about 6.32 million students with disabilities ages 6-21 attending schools, and of those, 64% are in a mainstream classroom most of their day, and another 18% spend 40%-79% of their days in the mainstream classroom (n.d.). The need for grading standards is here, and administrators can help get that ball rolling.

In addition, if teachers and administrators are using grades to compare and communicate the quality of education across school districts, there needs to be consistency in grading and, therefore, grading standards (Folger & Roberts, 2022). Educators who participated in their study raised concerns about the utility of report card grades but acknowledged that they could only be compared with consistency. While they were examining school district grading and how socioeconomics and locations can affect a school district's grade, it really came back to how the teachers were grading students and how that could be made more consistent.

Similarly, one study reflection on the 25th anniversary of the U.S. Supreme Court's decision in *Board of Education v. Rowley* recommended that administrators and teachers understand the essence of Free Appropriate Public Education (FAPE) and how it is also a part of IDEA (Yell et al., 2007). IDEA is a complicated law, and all administrators, teachers, and teacher trainers need to understand how it affects schools. When it comes to grading, schools must conduct relevant assessments of students that provide information to teachers on a student's unique academic and functional needs. They also need to develop relevant and meaningful educational programs based on the assessments and make sure that they are grounded in researched-based practices. Further, they need to generate measurable annual goals and monitor the student's progress on those goals, making changes when necessary. Certainly, with this in mind, it is the school's responsibility to do right by the students with disabilities and establish effective grading practices that can be individualized and yet have fidelity from year to year.

Chapter III: Discussion and Conclusion

Summary of Literature

Students with intellectual disabilities learn at a young age that they do not measure up to their peers, and for many, the grading systems in place do nothing to help them gain motivation or understanding of their own capabilities. Without a grading system in place that accurately provides information about what the student understands, their learning is in jeopardy of becoming stagnant, with little motivation, and could affect their mental health. Sadly, even after decades of disabled students attending mainstream classrooms, many mainstream teachers have not had coursework or professional development in how to provide accommodations, modifications, and effective grading practices for those students.

Despite the lack of research supporting traditional-based grading systems, many schools are still using that process and relying on computers to generate the grades assigned to students. The overwhelming reasoning behind this is that post-secondary schools want grade point averages, which can only be achieved using traditional grading. This study showed that belief to be untrue and that the research on grading systems favors a standards-based grading system that separates behavior and other attributes from the understanding of the standards being taught.

Research further indicates that traditional-based grading is not accurate and provides little information regarding mastery of content standards. Grades should be assigned without bias and reflect the students' comprehension of the standards being taught in the subject matter. In addition, this study provided the information from research to include that with a standards-based grading system in place it is easier for teachers and all stakeholders to see each of the components of students' learning and behavior. With this information, teachers can more

effectively support students where they may have weaknesses and also see where they may need to be encouraged to expand their knowledge.

Limitations of Research

The goal of this thesis was to research evidenced-based grading systems that could be used to better reflect usable information for the growing population of disabled students participating in mainstream classes. While most of the studies found included students with intellectual disabilities, some did not break down the students special education criteria that they met that qualified them for special education. In addition, I sought out research that reflected how these students felt about grades and how the grades may affect their mental health and motivation to learn.

As I searched for studies that included grading systems for intellectual disabilities, a number of the studies addressed the lack of coursework for general educators in the area of special education as part of their licensing requirements. This surprised me as most of the educators presently in classrooms received their education after mainstreaming disabled students was on the rise. I then expanded my research to include the necessary evidence for successful collaboration and what role the administration can play in accommodating a better grading system for these students. Perhaps the lack of current research on best practices for standards-based grading significantly contributes to the disparity and lack of fidelity in across-the-board implementation at both the district and classroom levels. More needs to be done to inform teacher training and professional development for general education teachers to use effective standards-based grading practices.

Implications of Future Research

As Lehman et al. (2018) noted, standards-based grading reform started in the 1980s and 1990s, and still decades later, many schools are still utilizing an ineffective grading system that has not changed in a century. Schools need to identify what is being graded and how it is reported on the report cards. Research needs to further explore traditional grading and standards-based grading in a wider geographical area with a larger population.

Further studies should also include universities and other post-secondary institutions and their understanding of grading in elementary and secondary schools and what role they could play in a more accurate grading system. In addition, future studies should also include best practices in evaluating and grading non-disabled and special education students as a content standard for all education programs and professional development for both general and special education educators at all grade levels.

Finally, future studies should focus on how a more effective grading reform can include a grading system for students with disabilities in mainstream schools and classes.

Implications For Professional Practice

The purpose of this study was to help special education teachers understand that there are possibilities in implementing a grading system for students with intellectual disabilities that is more effective for students and informative for teachers. Further, this study sought to understand the grading systems in place and how these systems are affecting the intellectually disabled student population in the schools. It became evident through this study that although research into more effective grading procedures is available, many schools are hanging onto grading systems that simply do not reflect an accurate picture of student abilities and understanding of

the course standards. What also became apparent was that many of the teachers in a general education setting have not had background knowledge opportunities to fully understand accommodations, modifications, and grading of the growing number of students who are partaking in mainstream education. More importantly, little attention has been given to how these grading systems impact already fragile students. The study also investigated strategies that special education teachers could use to help advocate for their students and to begin conversations that could lead to a more effective understanding of individual student's needs and capabilities. This could also lead to procedure changes in the grading systems in their schools and districts.

Bringing the building administrator into the conversation would be a good first step for a special education teacher to propose, that they would like to consider looking at implementing a new system and to identify stakeholders (i.e., parents, students, teachers, and specialists) that would be willing to look at effective grading practices and steps for implementation. This could include starting with a low-level survey for the special education teacher and the general education teacher. Districts' research and assessment teams would examine the ranked survey items and use the results as a guide to define what the grades for these students could reflect moving forward. The survey could include the table below, or one similar, from an article by Munk and Bursuck (2003), though not peer-reviewed, included ideas on how teachers and other stakeholders could start the conversation on grading students with disabilities in the mainstream classroom by ranking the following by importance from one to thirteen.

Grading Students with Disabilities - table

- | | |
|--|----------|
| 1. Tell me whether my child has improved in his/her classes. | Rank ___ |
| 2. Tell me how to help my child plan for his/her future. | Rank ___ |
| 3. Tell me how hard my child is trying. | Rank ___ |
| 4. Help me plan for what my child will do after high school. | Rank ___ |
| 5. Tell me what my child needs to improve on to keep a good grade. | Rank ___ |
| 6. Tell me how well my child works with classmates. | Rank ___ |
| 7. Tell me what my child is good at and not so good at. | Rank ___ |
| 8. Tell colleges and employers what my child is good at. | Rank ___ |
| 9. Tell me how much my child can do on his/her own. | Rank ___ |
| 10. Tell me how my child's performance compares to other children's. | Rank ___ |
| 11. Tell me how to help my child improve. | Rank ___ |
| 12. Tell me what classes my child should take in high school. | Rank ___ |
| 13. Motivate my child to try harder. | Rank ___ |

Source: Adapted from (Munk, 2003). Solving the grading puzzle for students with disabilities.

Whitefish Bay, WI: Knowledge by Design. (Munk & Bursuck, 2003).

Educators may be surprised first by their colleagues and secondly by how the parents respond to the survey and what their interpretations of effective grading practices should reflect. With that information, the team could examine the results and explore how to move forward. The team may decide to implement a standard-based grading system or a modified version to help break down the information into more defined areas. The team may have to modify the standards for individual students to ensure that they would be attainable by the student based on the annual

IEP. All of this information should also be reflected in the student's IEP in the accommodations and modifications section. Although this process would include some time and work on the front end, if implemented carefully, it should be much easier for the general education teacher to grade the student. Once the administrator sees how the process can not only help the stakeholders better understand what the grades reflect but also how this grading system can better motivate the students, perhaps the administrator would help streamline the process across the district. Other grading adaptations that work include identifying and prioritizing content and the related assignments, incorporating progress on IEP objectives into students' grades, changing the scales and weights for students with disabilities, incorporating improvement measures into students' grades, and basing part of students' grades on the processes needed for the student to complete work and effort (Munk & Bursuck, 2003).

Conclusion

The purpose of this study was to review the research regarding school and district grading systems, specifically focusing on special education students in mainstream settings. The research included grading systems currently utilized by schools and how they affect students with disabilities in the mainstream classrooms. First, the lack of current research was disconcerting, and despite a plethora of information available, much of it was not recent. Second, even with the lack of current research data, what was available pointed to the need for districts to move to a standards-based grading system. Third, colleges of education and other professional development opportunities should prioritize how educators can move to a standards-based grading system that reflects student ability. Finally, school districts and other national and statewide organizations,

including special education parent advocates and advisory committees, should prioritize consistent implementation of standards-based grading systems for special education students.

References

Board of Education v. Rowley, 458 U.S. 176 (1982).

Babik, I., & Gardner, E. S. (2021). Factors affecting the perception of disability: A developmental perspective. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.702166>

Calhoun, M. L. (1986). Interpreting report card grades in secondary schools: Perceptions of handicapped and nonhandicapped students. *Diagnostique*, 11(2), 117–124. <https://doi.org/10.1177/073724778601100206>

Calhoun, M., & Beattie, J. (1984). Assigning grades in the high school mainstream: Perceptions of teachers and students. *Diagnostique*, 9(4), 218–225. <https://doi.org/10.1177/073724778400900403>

Cooney, G., Jahoda, A., Gumley, A., & Knott, F. (2006). Young people with intellectual disabilities attending mainstream and segregated schooling: Perceived stigma, social comparison and future aspirations. *Journal of Intellectual Disability Research*, 50(6), 432–444. <https://doi-org.ezproxy.bethel.edu/10.1111/j.1365-2788.2006.00789.x>

Christiansen, J., & Vogel, J. R. (1998). A Decision Model for: Grading Students with Disabilities. *TEACHING Exceptional Children*, 31(2), 30–35. <https://doi.org/10.1177/004005999803100205>

- Dalgaard, N. T., Bondebjerg, A., Viinholt, B. C. A., & Filges, T. (2022). The effects of inclusion on academic achievement, socioemotional development and wellbeing of children with special educational needs. *Campbell Systematic Reviews*, 18(4). <https://doi-org.ezproxy.bethel.edu/10.1002/cl2.1291>
- Deutsch, M. (1979). Education and distributive justice: Some reflections on grading systems. *American Psychologist*, 34(5), 391–401. <https://doi.org/10.1037/0003-066x.34.5.391>
- Dev, P. C. (1998). Intrinsic motivation and the student with learning disabilities. *Journal of Research and Development in Education*, 31(2), 98–108. <https://search-ebSCOhost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ561993&site=ehost-live&scope=site>.
- Donahoe, K., & Zigmond, N. (1990). Academic grades of ninth-grade urban learning-disabled students and low-achieving peers. *Exceptionality*, 1(1), 17–27. <https://doi.org/10.1080/09362839009524739>
- Engelberg, R. A., & Evans, E. D. (1986). Perceptions and attitudes about school grading practices among intellectually gifted, learning-disabled, and normal elementary school pupils. *The Journal of Special Education*, 20(1), 91–101. <https://doi.org/10.1177/002246698602000110>

- Folger, T. D., & Roberts, A. C. (2022). Examining school accountability: Discriminating schools' A-F report card grades. *Mid-Western Educational Researcher*, 34(3), 295–316. <https://search-ebSCOhost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ1362683&site=ehost-live&scope=site>
- Guskey, T. R. (2011). Five obstacles to grading reform. *Educational Leadership*, 69(3), 16–21. <https://search-ebSCOhost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=keh&AN=66901494&site=ehost-live&scope=site>.
- Guskey, T. R. (2001). Helping standards make the grade. *Educational Leadership*, 59(1), 20–27. <https://search-ebSCOhost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ634856&site=ehost-live&scope=site>.
- Guskey, T. R., & Jung, L. A. (2009). Grading and reporting in a standards-based environment: Implications for students with special needs. *Theory Into Practice*, 48(1), 53–62. <https://doi.org/10.1080/00405840802577619>
- Hendrikson, J., & Gable, R. A. (1997). Collaborative assessment of students with diverse needs: Equitable, accountable, and effective grading. *Preventing School Failure*, 41(4), 159–163. <https://search-ebSCOhost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ555505&site=ehost-live&scope=site>.
- Hintze, J. L. (1990). Number cruncher statistical system. Kaysville, Utah.

- Huck, S., Kemp, C., & Carter, M. (2010). Self-concept of children with intellectual disability in mainstream settings. *Journal of Intellectual & Developmental Disability*, 35(3), 141–154. <https://doi-org.ezproxy.bethel.edu/10.3109/13668250.2010.489226>
- IDEA FACTSHEET: #3. Home. (n.d.). <http://www.nsba.org/>
- Jung, L. A., & Guskey, T. R. (2007). Standards-based grading and reporting; A model for special education. *TEACHING Exceptional Children*, 40(2), 48–53. <https://doi.org/10.1177/004005990704000206>
- Jung, L. A., & Guskey, T. R. (2007). Determining fair grades for students with special needs: A standards-based model. Online Submission. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=ED497353&site=ehost-live&scope=site>.
- Kausik, N. H., & Hussain, D. (2023). The impact of inclusive education on academic motivation, academic self-efficacy, and well-being of students with learning disability. *Journal of Education*, 203(2), 251–257. <https://doi-org.ezproxy.bethel.edu/10.1177/00220574211031957>
- Klingner, J. K., & Vaughn, S. (1999). Students' perceptions of instruction in inclusion classrooms: Implications for students with learning disabilities. *Exceptional Children*, 66(1), 23–37. <https://doi.org/10.1177/001440299906600102>

- Kurth, J. A., Lockman-Turner, E., Burke, K., & Ruppert, A. L. (2021). Curricular philosophies reflected in individualized education program goals for students with complex support needs. *Intellectual and Developmental Disabilities*, 59(4), 283–294. <https://doi-org.ezproxy.bethel.edu/10.1352/1934-9556-59.4.283>
- Lee, S.-H., Wehmeyer, M. L., Soukup, J. H., & Palmer, S. B. (2010). Impact of curriculum modifications on access to the general education curriculum for students with disabilities. *Exceptional Children*, 76(2), 213–233. <https://doi.org/10.1177/001440291007600205>
- Lehman, E., De Jong, D., & Baron, M. (2018). Investigating the relationship of standards-based grades vs. traditional-based grades to results of the scholastic math inventory at the middle school level. *Education Leadership Review of Doctoral Research*, 6, 1–16. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ1204463&site=ehost-live&scope=site>.
- Lewis, D. (2022). Impacts of standards-based grading on students' mindset and test anxiety. *Journal of the Scholarship of Teaching and Learning*, 22(2), 67–77. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ1347380&site=ehost-live&scope=site>.
- Link, L. J., & Guskey, T. R. (2022). Is standards-based grading effective? *Theory Into Practice*, 61(4), 406–417. <https://doi.org/10.1080/00405841.2022.2107338>

- Maag, J. W., & Reid, R. (2006). Depression among students with learning disabilities: Assessing the risk. *Journal of Learning Disabilities*, 39(1), 3–10. <https://doi-org.ezproxy.bethel.edu/10.1177/00222194060390010201>
- Maag, J. W., & Reid, R. (1994). The phenomenology of depression among students with and without learning disabilities: More similar than different. *Learning Disabilities Research & Practice*, 9, 91-103. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ486401&site=ehost-live&scope=site>
- Maenner, M. J., Blumberg, S. J., Kogan, M. D., Christensen, D., Yeargin-Allsopp, M., & Schieve, L. A. (2016). Prevalence of cerebral palsy and intellectual disability among children identified in two U.S. National Surveys, 2011–2013. *Annals of Epidemiology*, 26(3), 222–226. <https://doi.org/10.1016/j.annepidem.2016.01.001>
- McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School belonging among low-income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools*, 45(5), 387–401. <https://doi-org.ezproxy.bethel.edu/10.1002/pits.20304>
- Munk, D. D., & Bursuck, W. D. (1998). Report card grading adaptations for students with disabilities. *Intervention in School and Clinic*, 33(5), 306–308. <https://doi.org/10.1177/105345129803300508>

- Munk, D. D., & Bursuck, W. D. (2001). What Report Card Grades Should and Do Communicate: Perceptions of Parents of secondary Students With and Without Disabilities. *Remedial and Special Education*, 22(5), 280–287. <https://doi.org/10.1177/074193250102200503>
- Munk, D.D., & Bursuck, W. D. (2003). *Grading students with disabilities*. ASCD. <https://www.ascd.org/el/articles/grading-students-with-disabilities>
- Munk, D. D., & Bursuck, W. D. (2017). Personalized grading plans: A systematic approach to making the grades of included students more accurate and meaningful. *Focus on Exceptional Children*, 36(9). <https://doi.org/10.17161/fec.v36i9.6807>
- Pollard, R., & Rojewski, J. (1993). An examination of problems associated with grading students with special needs. *Journal of Instructional Psychology*, 20(2), 154. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=tfh&AN=9607242290&site=ehost-live&scope=site>
- Polloway, E. A., Bursuck, W. D., Jayanthi, M., Epstein, M. H., & Nelson, J. S. (1996). Treatment acceptability: Determining appropriate interventions within inclusive classrooms. *Intervention in School and Clinic*, 31(3), 133–144. <https://doi.org/10.1177/105345129603100302>

- Reddig, K., Campbell-Whatley, G., Booker, K., & Merriweather, L. (2020, November 30). *Teachers' perceptions of cultural and linguistically diverse students with special needs in inclusive settings*. *Insights into Learning Disabilities*. <https://eric.ed.gov/?q=lack&pg=200&id=EJ1315977>
- Ring, M. M., & Reetz, L. (2002). Grading students with learning disabilities in inclusive middle schools. *Middle School Journal*, 34(2), 12–18. <https://doi.org/10.1080/00940771.2002.11495348>
- Salend, S. J. (1995). Modifying tests for diverse learners. *Intervention in School and Clinic*, 31(2), 84–90. <https://doi.org/10.1177/105345129503100204>
- Selby, D., & Murphy, S. (1992). Graded or degraded: Perceptions of letter-grading for mainstreamed learning-disabled students. *B.C. Journal of Special Education*, 16(1), 92–104. <https://search-ebshost-com.ezproxy.bethel.edu/login.aspx?direct=true&db=eric&AN=EJ450133&site=ehost-live&scope=site>
- Silva, M., Munk, D. D., & Bursuck, W. D. (2005). Grading adaptations for students with disabilities. *Intervention in School & Clinic*, 41(2), 87–98. <https://doi-org.ezproxy.bethel.edu/10.1177/10534512050410020901>

- Struyk, L. R., Epstein, M. H., Bursuck, W., Polloway, E. A., McConeghy, J., & Cole, K. B. (1995). Homework, grading, and testing practices used by teachers for students with and without disabilities. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 69(1), 50–55. <https://doi.org/10.1080/00098655.1995.10114269>
- Whitney, D. G., Shapiro, D. N., Peterson, M. D., & Warschausky, S. A. (2018). Factors associated with depression and anxiety in children with intellectual disabilities. *Journal of Intellectual Disability Research*, 63(5), 408–417. <https://doi.org/10.1111/jir.12583>
- Yell, M. L., Katiyannis, A., & Hazelkorn, M. (2007). Reflections on the 25th anniversary of the U.S. Supreme Court’s decision in Board of Education v. Rowley. *Focus on Exceptional Children*, 39(9). <https://doi.org/10.17161/foec.v39i9.6876>