

Combatting Disproportionality Before It is Perpetuated: Initial Results of a Pre-Service Teacher Preparation Practice

Denise R. Foley

Worcester State University, United States

Abstract

General education teachers, especially those at the middle and secondary levels, often feel ill-equipped to effectively teach their increasingly racially, ethnically, culturally and linguistically diverse students, as well as those with special needs and disabilities. They are often unprepared to meet their legal and ethical responsibilities under special educational. Further, they are often unaware of the phenomenon of disproportionality in U.S. schools. This paper is unique to the literature in that it is the first known attempt to understand teachers' responses to actual items on one of the most-widely employed and thus influential, tools in the special education identification process. Over eight hundred responses were generated by eighty-three preservice teachers. Initial results found the most questions and comments were on items that measure signs of ADHD, autism and those associated with the federal special education disability categories of emotional disturbance and intellectual impairment, where males, students of color, culturally and linguistically diverse students and those from low income households have historically and are currently disproportionately over represented in special education identification, as well as, subject to disproportional rates and severities in the administration of school-related discipline.

1. Introduction

Over 60% of all students with disabilities receive half to all of their instruction in general education settings. Students with high incidence disabilities comprise 70% of all students with special needs and spent 80% or more of their day in general education settings. The disabilities are specific learning disabilities (72%), communication disorder (88%) and other health impairments including attention deficit hyperactivity disorder (67%) [1].

Though inclusion is now the “norm” in the U.S., research has consistently shown that educators, especially early career and middle/secondary teachers, feel unprepared to teach students with special needs [2]. Similarly, the research highlights

how university training programs generally do not adequately prepare teachers to meet the range of special needs that their students present [3].

Relatedly, general education teachers lack essential knowledge regarding special education law [4]. Given that teachers are often the first to raise concerns that a child may have a disability and refer them for an evaluation, it is critical that they not only understand special education law, but also what their professional, ethical and legally-mandated roles and responsibilities are.

In terms of focus and methodology, this paper is unique in the literature [5]. It describes the initial results of a key field-based assignment in a recently created course that is required for licensure and was specifically designed to better prepare general educators to: understand and appreciate their increasingly diverse students, effectively teach ALL students including those with special needs and other learning vulnerabilities and differences, to understand special education law and processes, as well as, the phenomenon of disproportionality and how they may begin to combat it.

2. Literature Review

2.1. Diversity in U.S. Schools

In the United States, all children may begin attending publicly funded schools in kindergarten until they graduate from high school at no cost to their families. For some students, typically those with moderate to severe disabilities, the age range of their entitlement for publicly funded special education and related services (e.g., speech and language therapy) may begin as early as age three years and extend until they turn age 21 or 22 years (depending on the state).

Though the number of students, approximately 50 million, ages 3 years (preschool) through 19 years (the typical age to graduate from high school) enrolled in public schools has held steady from 2009 to 2020 [6], the racial and ethnic makeup of the student population has changed dramatically during that same time period. In 2014, for the first time in U.S. history, students who identified as White and non-Hispanic, made up less than fifty percent of students enrolled in the public schools [7]. In all states across the country, from 2009 to 2020, the number of White students decreased.

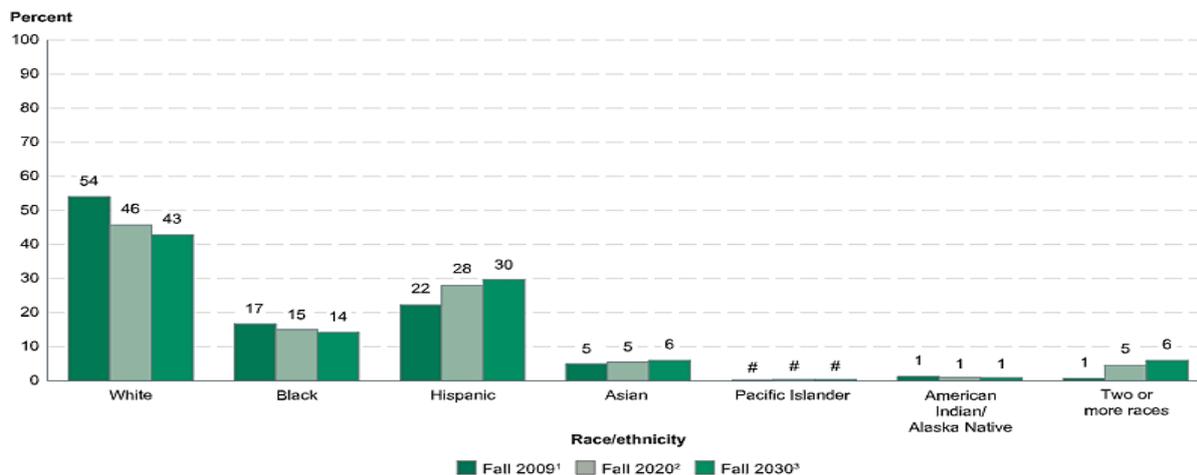


Figure 1. Percentage distribution of elementary & secondary student enrollment by race/ethnicity: Fall 2009, Fall 2020 & Fall 2030 [7]

During this same time, the percentage of students who were identified as Hispanic, Asian or two or more races increased. For academic year 2019-20, the most current national data available, the percentage of White students was 46%. As illustrated in Figure 1, the trend for an increasingly racial and ethnic richness in the student population is projected to continue through this decade.

Unfortunately, the racial and ethnic makeup of educators does not match that of students. As shown in Figure 2, for decades, the diversity of the teachers has been stagnant, with over eighty percent of the profession identifying as White and non-Hispanic [8].

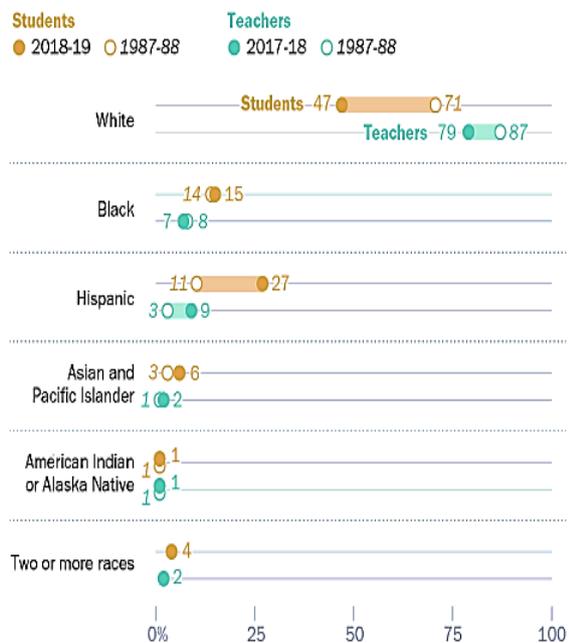


Figure 2. Racial and ethnic comparison of U.S. teachers & students: Percentages over time for Academic Years 1987-88 to 2018-19 [8]

Though the racial and ethnic identities of teachers varies by state, for the academic year 2017-18, the Pew Center found that in all but one state (Hawaii), teachers were more likely to be White than their students. On average, public-school teachers were 27 percentage points more likely to be White than their students. The magnitude of the disparity between the racial and ethnic makeup of teachers versus their students across 49 of the 50 states (data from Maryland and the District of Columbia were not included in the report) varied widely. The greatest gap was seen in Nevada where there was a 45-point greater likelihood that a teacher would be White versus their students. [8].

The same limited racial and ethnic diversity is seen across other major school professions with 80% of school principals [9], 90% of school psychologists [10] and 93% of speech-language therapists [11] identifying as White and not Hispanic or Latino. Various informed leaders and stakeholders have suggested that the persistent and yawning gap between the (limited) diversity of teachers and their students leads to biased and stereotyped interpretations by teachers of student behavior and thus, perhaps, is a key factor in the multifaceted of disproportionality.

2.2. Disproportionality

2.2.1. Definition and Major Types in Schools

Disproportionality refers to the over- or under-representation of a particular group in certain programs or categories relative to that group’s presence in the general population and that it differs substantially from the representation of other groups in the same program or category.

The phenomenon of disproportionality in U.S. schools is long-standing: first raised in the late 1960s [12]. Disproportionality has also been well-documented. Numerous studies have shown the

differential treatment of and resultant detrimental effects of the different types of disproportionality on students who are economically-disadvantaged, culturally and linguistically diverse (CLD), male and racially and ethnically diverse, particularly those who are Black and Hispanic.

Currently, the literature highlights three main areas of disproportionality affecting these groups of students. These are: disciplinary disproportionality, special education identification, and placement after eligibility is determined.

Disciplinary disproportionality refers to the high rates at which certain groups of students receive serious disciplinary consequences beyond that of typical classroom management practices. These include being referred to the school administrators for disciplinary action, suspensions, school arrests and expulsion [12]. A recent and jarring example disciplinary disproportionality was documented by the 2013-14 Civil Rights Data Collection which found that while Black students made up only 16% of the U.S. school population, they were subject to 40% of all suspensions nationally [13]. In 2014, the U.S. Department of Education and the U.S. Department of Justice issued a rare *Dear Colleague Letter* (DCL) which highlighted racial disparities in school discipline and provided guidance. The DCL highlighted a long-standing trend that Black students are three times as likely as their White peers to be expelled or suspended. The DCL emphasized how Black students made up 35% of students who are suspended once, 44% of students suspended more than once and 36% of students who are expelled, meaning they are stripped of their rights to attend the public schools of the city, town, or municipality in which they reside. Finally, the DCL described how a shocking 50% of all students who were arrested for school-related incidents or referred to law enforcement were Black or Hispanic [14].

Unfortunately, this pattern of racial disparities in the administration of school discipline is so prevalent and has such strong negative effects that there are now initiatives which seek to “shut down” “School to Prison Pipelines.”

The second type of disproportionality generally tends to receive less attention in the literature but is nevertheless critically important to be aware of: disproportionality in placement. This refers to where, after a student is determined to be eligible for special education services, their instruction and related supports take place. Both the spirit and letter of federal and state laws require that the special education services a student receives to address the goals of their Individualized Education Program (IEP) occur in the Least Restrictive Environment (LRE), or to the greatest extent possible with their nondisabled peers. Research has shown a strong positive relationship between the

amount of time students with disabilities spend in the general education classroom and positive educational outcomes including but not limited to higher test scores and graduation rates.

Each year, the percentage of time that 6- to 21-year-old students with disabilities who spend 80% or more time in general education classes increases. In the fall of 2020, that overall percentage was 66% [15]. However, sharp racial and ethnic disparities in inclusion, exist. While 55% of White students spend 80% or more of their day in general education classroom, only 33% of Black students are provided the same opportunity to learn with their typically developing peers and engage in more rigorous learning experiences than might be found in more restrictive, separate special education settings. Racial and ethnic disparities have also been found in the less-inclusive/more-restrictive education of Hispanic and American Indian students identified as having special needs [12].

2.2.2. Disproportionality in Special Education Identification

Of greatest relevance for this paper is the most often discussed and well-researched, yet very persistent, type of disproportionality: disparities in special education identification. Researchers, professional organizations, and policy makers alike have highlighted not only the over-identification of racially and ethnically diverse students, particularly Black and Hispanic students, as “disabled” as compared to their White and Asian peers, but also their disproportionate classification under certain disability categories.

During academic year 2020-21, 15% percent or 7.4 million three- to twenty-one-year-old U.S. public schools students received special education services. Table 1 summarizes the percentage of students in different racial and ethnic groups eligible for special education.

Table 1. Percentage of Students Eligible for Special Education by Race and Ethnicity

Groups of Students	Percentage Eligible for Special Education
All Students	15
White	15
Black	17
Hispanic	14
Asian	8
American Indians/ Alaska Natives	19
Pacific Islander	12
Two or More Races	15

Source: NCES [15]

Though Table 1 shows that a greater percentage of Black and Native Americans (referred to as “American Indians” by the U.S. Institute for Educational Science/National Center for Educational Statistics) and Alaska Natives were determined to have disabilities and were eligible for special education services as compared to their White and Asian counterparts, the table does not capture the magnitude of disproportionality. Rather, it is merely the “tip of the iceberg.”

To get a clearer picture of the magnitude of the problem of disproportionality in the identification of students for special education, we must first scrutinize the rates at which different groups of students are determined eligible for special education services. Summarizing the most recent data available, Figure 3 highlights how students of color (with the exception of Asian students) are identified for special education at significantly higher rates than their White peers. These differences in rates are often referred to as “risk ratios.”

As compared to their White counterparts, Black, Hispanic and Native students all have higher risk ratios for being identified with disabilities. For example, Black children and adolescents are 40 percent more likely to be identified with a disability and American Indian and Alaska Native students are identified as having a special education disabilities at twice the rate of the general student population [12].

Compounding the potential harm of being (over) identified as having a disability is the disparity in the disability categories under which to racially and ethnically diverse students are typically (and likely, mis-) labelled. Summarizing the most recent data available, Figure 4 highlights the disproportional representation of racial and ethnically diverse students as compared to White students in several major categories of disability.

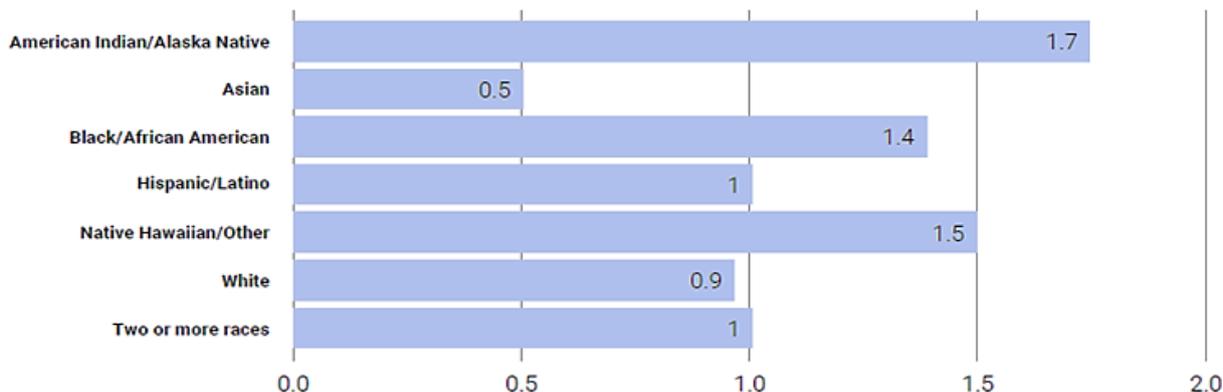


Figure 3. Risk ratios for students ages 6 through 21 served under IDEA within racial/ethnic groups: Fall 2016 [12]

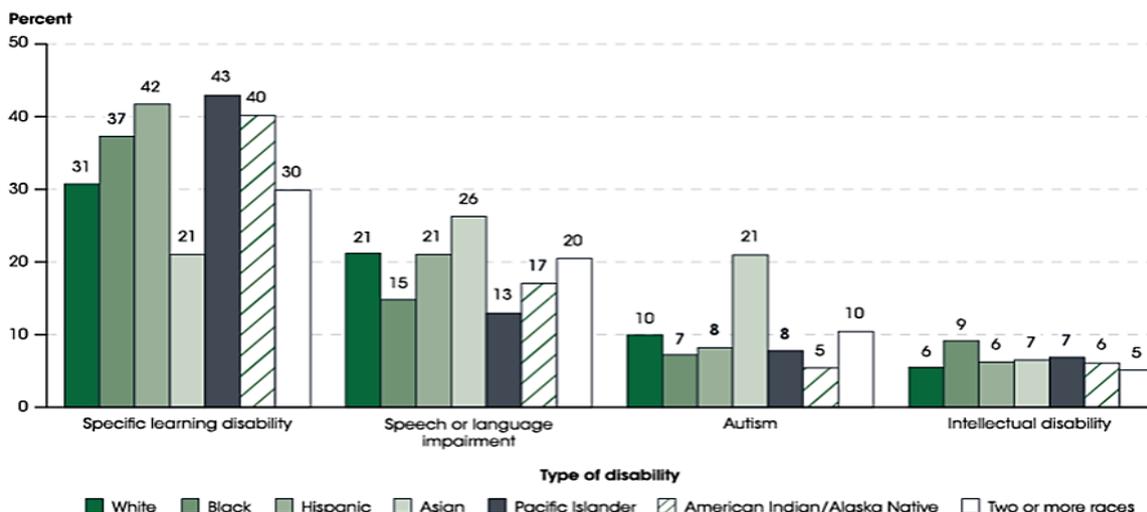


Figure 4. Percentage of Students ages 3- to 21-year-olds, serviced under IDEA by race/ethnicity and disability category [16]

During academic year 2015–16, the percentage of students who received services for a specific learning disability was higher (as much as more than twice as high) for those who were Pacific Islander, Hispanic, American Indian/Alaska Native and Black as compared to their White and Asian counterparts. The percentage of students served under IDEA who were labelled as having an Intellectual Disability was highest for those who were Black. This rate was a staggering 30% higher than the percentage of students of the other races/ethnicities [16].

Researchers have shown how disproportionality in special education identification and labelling increases exponentially for racially and ethnically diverse students when they present with other demographic and risk factors like poverty and adverse childhood experiences. That said, current studies show that even when controlling for the effects of income, Black students are *twice* as likely as their White counterparts to be classified as having intellectual impairment or emotional disturbance [12].

These statistics are made even more sobering when we realize that minimal, if any, progress has been made in decreasing the risk ratios for racially and ethnically diverse students the original Federal Special Education entitlement law was first passed almost 50 years ago [17].

Researchers posit that beyond systemic racism [12], implicit biases in teachers, a generally monolingual, White group, play a significant role in disproportionality in special education identification--beginning as early as preschool [18].

2.3. Special Education Eligibility

2.3.1. The Process: Mandates and Ideals

“Child find” is a term which highlights the legal requirement of public schools to identify and evaluate students who may have a disability and require special education instruction and/or related services. Though anyone with knowledge of a student may refer them for special education, typically, a general education classroom teacher is the first to notice potential problems and refer a student for an initial evaluation. While some details may differ (e.g., number of days to complete an evaluation: school versus calendar dates), all states must meet the federal standard for conducting a multi-source, multi-method, multi-disciplinary team evaluation in all areas of suspected need.

Before taking an in-depth look at the role of the teacher in multi-disciplinary team evaluations, we will quickly summarize the process by which a student is determined eligible for special education services in the United States. Though the process for triennial reevaluation determinations is almost

identical, for the purposes of this paper, we will limit ourselves to the discussion of initial evaluations.

The first step in the eligibility process is to determine if a student has one of the thirteen disabilities articulated in the federal Individuals with Disabilities Education Act (IDEA). These are:

1. Developmental Delay
2. Autism
3. Intellectual Impairment
4. Specific Learning Disability
5. Speech and Language Disability
6. Other Health Impairment
7. Traumatic Brain Injury
8. Emotional Disturbance
9. Visual Impairment
10. Deafness
11. Deaf-Blind
12. Orthopedic
13. Multiple Disabilities

States may add or expand categories of disability, but never have less. On the surface, Massachusetts where this paper is based, has only 10 disability categories; however, it does not. This is because it combines several federal disabilities, vision, deaf, deaf-blind, into one category “Sensory Disability.” In fact, in Massachusetts, the federal category of traumatic brain injury is expanded called “neurological impairment.” As such, students with brain injuries resulting from something other than accident or blunt force trauma (e.g., having a stroke), may qualify under that category.

The second step in the process is to determine if the student is making “effective progress.” Here, the team needs to answer if the student made documented and expected growth in knowledge and skills acquisition towards the learning standards articulated at the state frameworks and school district curriculum, as well as in social/emotional development. To be eligible for special education services, the student must be determined to NOT be making effective progress for their age/grade, and despite general education supports that all students are eligible for (generally referred to a “Tier 1” or “Tier 2” Interventions Response to Intervention models).

The third step in the eligibility process is for the team to determine if there is a direct and causal relationship between the student’s disability and their lack of progress in the general curriculum. During this step in the process, if they have not done so previously, members of the multidisciplinary team must rule out other factors, e.g., limited English proficiency or lack of opportunity to receive adequate instruction, as reason(s) for a student’s lack of progress.

The final step necessary to determine if a student eligible for special education services is for the

team to determine if the student requires specially designed instruction beyond accommodations. Specially designed instruction modifies one, two all three of the following:

- What curriculum standards the student will be expected to meet (This is modified in only the rarest of circumstances, for example a student with multiple and severe disabilities.)
- How the student is instructed (e.g., special methods and materials)
- How the student’s progress towards the curriculum standards is assessed

Figure 6 efficiently summarizes the eligibility process. It is the visual flow chart which all multi-disciplinary teams must follow and physically complete when making special education eligibility determinations in Massachusetts.

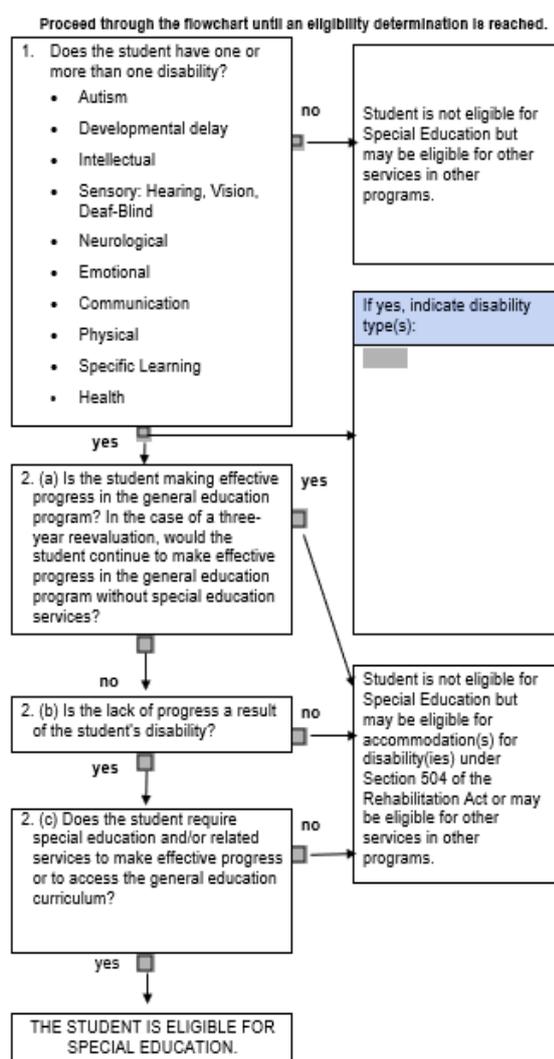


Figure 6. Massachusetts Special Education Eligibility Flowchart

2.3.2. The Process: Limitations and Reality

As might be evident in the outline above, as experts in their curriculum content area(s) and given their knowledge of what is “typical” or “within normal limits” for a student’s age and grade level, general education teachers are expected to have a critical role in all parts of the eligibility determination process. Experience has shown us however, that the gap between the ideal and expectations and the reality of teachers’ input into the special education process is wide. While multiple reasons for these research-to-practice gaps may be apparent, we will focus on two:

- meeting mandates versus recommendations for best practices in evaluations given limited resources, including time
- general educators’ real and perceived preparation

Massachusetts as in all states, requires assessment in all areas of suspected disability. It does not, however, mandate how each area of suspected disability is assessed, nor does it mandate how teachers provide input into the process.

Multidisciplinary teams are required to include one general education teacher. At the elementary level, this is typically the student’s classroom teacher who usually interacts with the student upwards of five hours a day, every day. In addition to teaching students multiple subjects like reading and mathematics, elementary teachers typically have more informal contact with their students, e.g., supervising them during transitions between classes, as well as, during lunch and/or recess. Elementary teachers are thus, typically able to provide multiple types of formal and informal data into the eligibility decision-making process.

By sharp contrast, at the middle and secondary levels, a student may meet with 7 to 10 different teachers per week/rotation of the schedule of their classes. For most districts, it is neither practical nor possible to provide “coverage” so that all middle or high school teachers may physically or even virtually (e.g., Zoom or Google meet) attend IEP meetings in real time. Thus, one teacher is selected and they speak are capable of only speaking to a student’s progress in their class. So can and do teams learn about a student’s progress in all classes?

2.3.3. The Process: The Use of Rating Scales

Rating scales are a popular method of gathering data from various members of multi-disciplinary teams, especially teachers. In fact, 75% of school psychologists, typically the lead evaluator in eligibility determinations, report using them on a regular basis [19]. The experience of this author, with support in the literature, has shown that in

addition to the grades they may record in a school's information/ learning management system, the most common form of (and oftentimes *ONLY*) input U.S. middle and high school teachers have into special education eligibility processes are standardized rating scales. Some rating scales are omnibus in nature, i.e., they are designed to provide a comprehensive profile of the students behavioral functioning. Others are designed to measure a narrower set of behaviors, for example, signs associated with depression or an attention deficit hyperactivity disorder (ADHD).

Assuming satisfactory psychometric properties, Campbell and Hammond [19] highlight several advantages to using of rating scales in eligibility evaluations. The first is efficiency. This includes relative ease of distribution (often via email/secure cloud server) to and gathering a significant amount of information about a student's functioning from multiple raters in a short period of time (usually ten to twenty minutes, or less) including low incidence, but very important to know about, behaviors like truancy or suicidal ideation.

A second advantage of rating scales articulated in the literature is that they allow for normative comparisons with same age, and in some cases, same-gender, peers. The third advantage cited is that raters, for the purposes of this paper, teachers, have observed the student a familiar, naturalistic setting—an important consideration given that they often initiate referrals for mental health or other services, as well as special education evaluations.

Regarding the proper administration of rating scales, the literature contends that beyond “some period of observation and contact with a student to produce a valid result” for teacher respondents, “no specialized experience is needed to provide behavior rating data [19, p.291].”

Given the breadth and depth of personal professional experience developed over several decades in the public schools, the voluminous research documenting the multifaceted phenomenon of disproportionality in U.S. schools, the studies highlighting how most teacher training programs do not adequately prepare general educators, especially at the middle and secondary levels for the realities of the profession, and perhaps most obvious, the directions and cautions for school psychologists on preparing respondents on how to complete rating scales, this author respectfully disagrees with the supposition that teacher respondents do not require training to properly complete rating scales whose results may be used as part of decision making at the individual student level, for example decisions around special education eligibility or “progress.”

2.4. Teacher Preparation Regarding Special Education: Training to Practice Gap

The richness of the diversities that students add to U.S. public schools evolves with each passing academic year. In addition, annually, the number and range of specialized needs that students present with increase in both quantity and complexity. These combine to challenge both the confidence and skill levels of even the most experienced general education teachers [20]. Similarly, and perhaps to a greater extent, though new and early career teachers, especially those at the middle and secondary levels, feel confident in their content area knowledge, including concepts and skills, they feel ill-prepared to meet the range of diverse learning needs that their students present with [21].

Perhaps setting the foundations for these feelings of inadequacy are the traditional models of teacher preparation where schools and colleges “often maintain separate programs of initial teacher preparation that directly mirror both the separate ways in which educational services are structured and delivered to students and the ways in which states license and certify teachers [22, p. 9]” for example, as a bilingual specialist, a special education teacher, or a general education teacher. This in turn, reinforces the idea that different types of students need different types of teachers.

This author is one of a small, but hopefully growing, number of teacher trainers who not only believe that it is necessary to but also actually create learning experiences designed to equip general education teachers with essential skills necessary to counteract the “silo” mindset around which preparation programs are traditionally organized [12] such that future teachers conceptualize their role as competent to teach *all* students.

Previously we described the development, execution and outcomes of a key assignment in a newly developed designed to help preservice middle and secondary teachers better understand and meet the needs of their diverse and exceptional learners [23]. Specifically, by the end of the course, the preservice teachers were required to demonstrate competency in designing and *delivering* content area lessons that not only reflected high expectations for *all* learners, but also included adaptations consistent with the principles of differentiated instruction, clearly incorporated the Universal Design for Learning Framework, as well as, include several accommodations commonly found in the IEPs of students with high incidence disabilities.

Reflecting the idea of better preparing teachers to teach *ALL* students, what follows next is a description of a second key assignment that was

created for the newly developed and still-evolving course for future middle and secondary teachers.

3. Methodology

3.1. Participants

Eighty-three participants self-identified as follows: 66% were female; 95% were White, non-Hispanic; 80% were mono-lingual in English. All sought to teachers at the middle and secondary levels (grades 5 through 12). More specific break down of the age/grade levels of their future students is not possible due to the nature of the licenses for some content areas. For examples, a (future) middle school mathematics teacher's license might be at the grades 5-8 or 8-12 level or their license might even be a combined math/science for grades 5-8. Further limiting specificity is the fact that some students had passed state-mandated licensure tests and/or completed required field work hours at certain grades levels while others had not at the time of their participation. In other words, given that participants were all pre-service and not yet licensed, many participants could not be accurately classified because they were not fully committed to or limited by grade level, and in some case subject matter, they sought to teach.

Given the nature of the questions asked and purpose of this paper, participants might be better understood in terms of the age range of the BASC-3 forms they chose to complete. Twenty-six (31%) completed BASC-3 ratings scales for children ages 6 through 11 years and fifty-seven (69%) completed BASC-3 forms for individuals ages 12 through 21 years.

Participants were enrolled in one of three courses. At the undergraduate level, they were in two (recently developed by this author and discussed elsewhere [23]) courses exploring learning disabilities and other exceptionalities and strategies to differentiate curriculum to meet student needs: one focusing on middle school, the other on secondary school. At the post-baccalaureate level, students were enrolled in a course focusing on general instructional strategies and classroom management that this author revised to reflect the realities of the learning and behavior needs of children with disabilities as well as, other special needs in inclusive grade 5-12 classrooms.

3.2. Purpose and Intended Outcomes

The purposes of the assignment which will be summarized below were twofold. The first was to directly address several of the undergraduate and post-baccalaureate Student Learning Outcomes (SLOs). These SLOs were written as follows. As a result of students' authentic and engaged

participation, at the conclusion of this course, students will be expected to be able to:

1. Demonstrate comprehension of ethical behavior in education e.g., confidentiality, reporting, etc.
2. Describe the processes through which students may become eligible for special education services or 504 plans
3. Identify & describe essential components of IEPs and 504 plans
4. Describe the role and responsibilities of general education teachers in special education & 504 eligibility processes including evaluations, and in the development, implementation and review of IEPs & 504 plans
5. Explain what is meant by the terms high- & low-incidence disabilities, describe their prevalence and key elements of the federal and state definitions for each disability category

The second purpose of the assignment was exploratory in nature and is the first known inquiry into the teacher reactions and comments on the specific BASC-3 items [5].

The third purpose of the assignment is perhaps the most important and hardest to quantify. It was part of this author's latest attempt for teachers to begin to examine the cultural lenses and personal biases through which they interpret the behavior of children and adolescents. Thus, at its very core, it is an attempt at making a concrete step towards combatting disproportionality in education.

3.3. Procedure

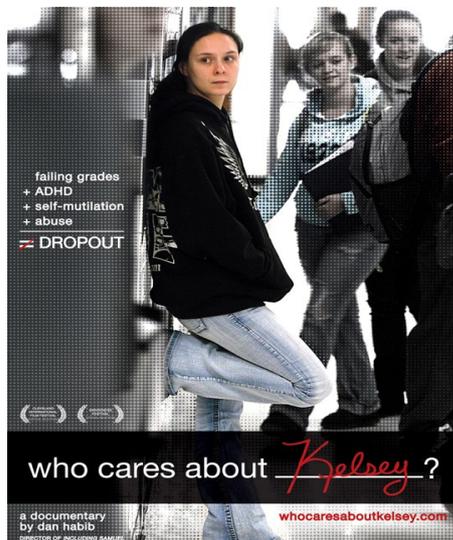
This assignment was completed through courses offered through the Education Department at Worcester State University (WSU) is a medium-sized, public university located in Worcester, New England's second-largest city, in central Massachusetts. When the assignments were completed all teacher training programs offered through the Education Department were accredited at the state and national levels by Massachusetts Department of Elementary and Secondary Education (DESE) and the Council for the Accreditation of Educator Preparation (CAEP), respectively.

The Education Department at WSU has a long-standing and close relationship with the city of Worcester Public Schools. As such, there are articulated Professional Development Partnerships that include the option to "place" any WSU student in designated PD schools throughout the city such that they could complete some or all of their fieldwork and practicum experiences required for licensure.

The first step in the assignment was for students to get approval to observe or to be assigned by WSU to observe in a school and classroom in the content area and grade level corresponding to the

license they sought. Due to logistic concerns, approvals to observe were required as early in the semester as possible, even before the assignment was even introduced. The second step was an introduction to the BASC-3 which included not only best practices, but also guidance for avoiding common pitfalls and actions that would invalidate the results. This author felt this was especially important because those invalidating behaviors are not mentioned in the written directions on the teacher forms. These will be elaborate upon below.

For the third step, students viewed a documentary, *Who Cares About Kelsey* (web image, below), which followed a high-risk teen with social, emotional and academic disabilities, exhibited behavioral problems, had a trauma background and family dysfunction as she repeated her senior year of high school. Discussed regarding how to answer key (per student nomination) BASC-3 items about Kelsey followed.



For the fourth step, students first had to choose one student to observe for no less than three whole class periods. A “target” 5th through 12th grade student could be chosen for ANY reason including but not limited to: convenience (i.e., student was easy to observe unobtrusively); the student exhibited behaviors of concern; the student appeared to have a high level of engagement in the class; or the student was recommended by the classroom teacher to observe.

Then, the preservice teachers selected the BASC-3 form appropriate for the age of a middle or high school students in the classroom they were observing in and read all the questions. The fifth and sixth steps were to observe the target student and complete (using pseudonyms) each item the BASC-3 rating scale including the two open ended responses regarding student strengths or concerns.

The seventh step was for students to complete a Google form that had two main parts. The first part

concerned items on the BASC-3. They were to identify, by item number and wording, at least five BASC-3 items and then describe why they chose the item. The following prompt was provided: *For example, did it confuse you, concern you, do you have questions, opinions or comments about it? These may include ANY reason and NOT limited to the item, rating scale, how it relates to the child, your personal reaction to it, etc.*

The second part of the Google form included three open response items which asked for any questions or comments about: the BASC-3, its use in eligibility determinations and other processes in school or clinical settings, and ask any questions or make any comments that they had not raised elsewhere.

The final two steps of the assignment were small group and whole class discussions about the BASC-3, the experience of using it, the items and how they were variously interpreted and then comparing and contrasting the experience of completing the BASC-3 versus completing a Massachusetts DESE developed and suggested observation-based form on the same student, including the quality and quantity of the information gleaned about a student through each.

3.4. Tool: BASC-3

3.4.1 Overview

The major tool used for this assignment were portions of the Behavior Assessment System for Children, Third Edition (BASC-3). The authors and publishers of the BASC-3 describe it as a “multimethod, multidimensional system used to evaluate the behavior and self-perceptions of children and young adults ages 2 through 25 years. [24, p. 1]”. The BASC-3 includes forms to complete systematic (momentary-time sampling) observations and a structured developmental history, as well as behavior intervention and behavioral and emotional skill building guides. The most widely used components of the BASC-3 are rating scales which can be completed by parents/guardians, teachers and caregivers, as well as student self-reports (beginning at age 8) to measure both adaptive as well as problem behaviors and “clinical” concerns.

As mentioned above, the rating scales are organized by student age in years. For parent/caregivers and teachers there are three forms: ages 2 to 5 years, 6 to 11 years and 12 to 21 years. Respondents answer whether a child/adolescent has been observed to behave in certain ways. Respondents answer that the behavior *Never*, *Sometimes*, *Often* or *Almost Always* occurs. Depending on the age of the child, parents/caregivers answer between 139 and 175

items and teachers answer between 105 and 165 items.

Beginning at age 8, children and adolescents may complete self-reports by answering if items about how some “boy and girls” or “young people” think or feel or act are either True or False for them or the frequency (*Never, Sometimes, Often or Almost Always*) with which the items are true. A structured interview is provided to administer to children ages 6 and 7 years.

BASC-3 rating scales are well normed and have very good psychometric properties for their stated purposes [25, 26]. Standard scores with a mean of 100 and a standard deviation of 15 are derived from comparisons with same aged peers either in combined or same-gender norms, and comparisons with “general population” peers or those with clinical diagnoses. Ratings are aligned with both broad- and narrow-based behavioral and emotional domains. Parent and Teacher rating forms provide standard scores for the following Composites:

- Adaptive Skills
- Behavioral Symptom Index
- Externalizing Problems
- Internalizing Problems
- School Problems (Teacher Form only)

Standard scores may also be derived for up to 16 Clinical and Adaptive scales for the Parent and Teacher forms. Item scoring may also provide standard scores for up to 7 Content scales, 5 Clinical “Probability” Indexes, and 5 different Executive Functioning Indexes.

Child and adolescent self-reports result in many of the same Composite Scores, Clinical and Adaptive Scale Scores, but many fewer Content scale and clinical index scores.

3.4.2 Opportunities to Improve Its Use in School

In this next section, we highlight some potential practice issues that may be inadvertently abet implicit bias and disproportionality. For the purposes of this paper, we will focus only on teacher respondents. In the BASC-3 Manual, rating scale administrators, typically school psychologists, are instructed to choose adults in a school setting who have had an “extended opportunity” to observe a student. “A month of daily contact or 6 to 8 weeks of several days a week observation” are described as “typically sufficient [24, p.11].”

Though the manual tells administrators that good rapport “motivates” teachers “to fill out the BASC-3 forms truthfully, completely and in a timely fashion,” it does not actually instruct the administrator to tell the teacher to do so. While the manual does ask the administrator to “consider” the teacher’s experience with the assessment process, to “communicate appropriate information about the nature” of the BASC-3, to “emphasize the value of

honest responses,” and to be “forthcoming and honest regarding the intended uses of the results, reasons for the evaluation, limits of confidentiality, and legal issues such as local laws regarding privileged communication [24, p. 11-12],” the manual actual does not provide a model of how to do so. Rather, the sample instructions provided merely reiterate directions that are written on the actual forms regarding answering all items and the using “Never” when answering an item.

Critical directions that are neither written in the manual *nor* on the actual rating forms, but in this author’s opinion, *should* be communicated to teachers (but clinical practice has shown that they are *not*) include:

1. A single form must be completed by only *one* teacher. Clinical practice has highlighted that when teachers work in teams (a common middle school model), they prefer to complete one single rating form as a group. This invalidates the form and defeats the stated purpose of the form of understanding “how the student responds to various teaching styles, academic demands and disciplinary standards [24, p.11].”
2. Cautions regarding cultural and linguistic differences, specifically, that they should not be regarded as deficiencies, should be emphasized. We have recently highlighted how cultural and linguistic differences between White teachers and their students may be potential drivers of South Asian (Indian) students’ unexpectedly disproportionate (high) representation under the special education category of autism [27].

4. Outcomes

The preservice teachers generated 801 unique responses and reflections regarding the items on the BASC-3 Teacher forms. Copyright and test security concerns prohibit the release of actual BASC-3 items which generated the most questions and comments. However, we can share the clinical and adaptive composite scales to which these items align. There were both similarities and differences between pre-service teachers’ reactions to items on the different age forms. Each form will be discussed separately.

4.1. Top Composite Scales Generating Reactions: Form 6-11

Figure 7 summarizes the number of comments or questions received across the items on each of the BASC-3 clinical and adaptive composite scales for the ages 6 to 11 years forms completed by the preservice teachers.

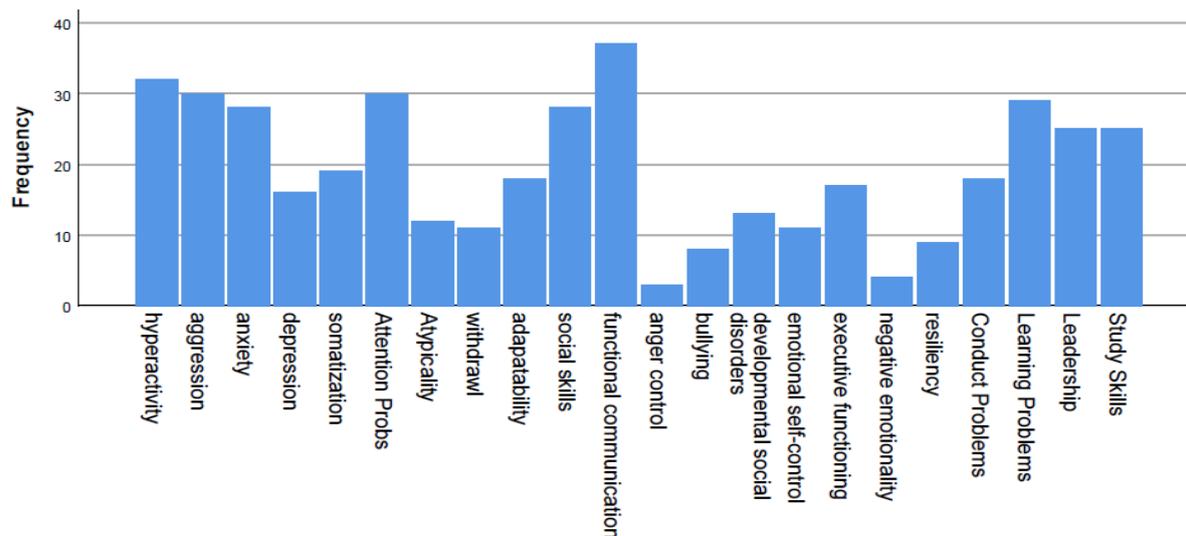


Figure 7. Number of items generating reactions from preservice teachers on each Clinical and Adaptive scale on the BASC-3 Teacher Rating Scale, ages 6 to 11 Form

Preservice teachers completing ratings on the form for 6- to 11-year-old students had the most questions and comments (8.7%) on the items (total of 10) corresponding to an adaptive behavior composite: the Functional Communication Scale. Per the authors of the BASC-3, the scale is an adaptive scale and measures a student's ability to express ideas and communicate in ways that others can easily understand. Deficits in functional communication are a hallmark of autism spectrum disorder. In terms of other special education eligibility categories, impairments in functional communication are, of course, seen in students with speech language disorders and often in students with intellectual impairment (formerly known as mental retardation). This is also a potential area of concern in students with emotional disturbance. (The ED category includes not only disorders like significant depression and anxiety, but also schizophrenia.)

The scale generating the second highest percentage of comments and questions was the Hyperactivity scale (7.6%), a clinical composite. Eleven items measure this scale on the ages 6 to 11 form. Per the authors of the BASC-3, the scale assesses the tendency to be overly active, rush through work or activities and act without thinking. In other words, it measures hyperactivity and impulsivity—hallmarks of Attention Deficit Hyperactivity Disorder. In terms of special educational eligibility categories, ADHD is classified under Other Health Impairment. Students with Emotional Disabilities are often regarded as demonstrated impulsive behavior and restlessness.

There was a tie between two clinical composite scales generating the third highest percentage of

comments and questions on the ages 6 to 11 teacher form. These were the Attention Problems and Aggression Scales. These scales are measured by eight and ten items, respectively. Each garnered 7.1% of all the questions and comments. While most recognize problems with attention as a hallmark of ADHD, some may not realize that these difficulties are almost always seen in individuals with intellectual impairment and brain injuries, as well as, those who experience disorders which might be classified under the federal disability category of Emotional Disturbance.

4.2. Top Composite Scales Generating Reactions: Form 12-21

Figure 8 summarizes the number of comments or questions received across the items on each of the BASC-3 clinical and adaptive composite scales for the ages 12 to 21 years form completed by the preservice teachers

Preservice teachers had the highest percentage of questions and comments (11.1%) on the items (total of 10) corresponding to the clinical composite, Atypicality. Per the authors of the BASC-3, this scale measures "the tendency to behave in ways that are considered odd or are commonly associated with psychosis [24, p.48]." Upon further examination this scale measures a child's tendency to act with a seeming lack of awareness of others or their environment. Students who score high on the Atypicality scale are often classified as having with autism or emotional disturbance.

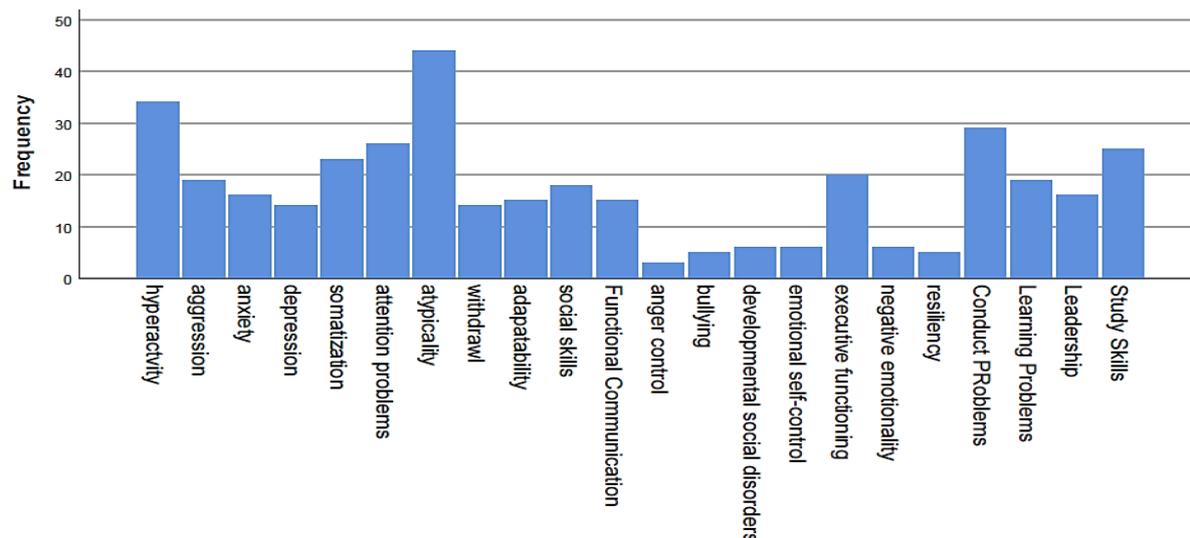


Figure 8. Number of items generating reactions from preservice teachers on each Clinical and Adaptive scale on the BASC-3 Teacher Rating Scale, ages 12-21 Form

Similar to their peers completing the form for ages 6 to 11 years, the clinical composite scale generating the second highest percentage of comments and questions from those completing the ages 12 to 21 years form was the Hyperactivity scale (9.0%). Eleven items measure this scale. As stated above, the scale assesses one of the hallmarks of Attention Deficit Hyperactivity Disorder, in federal parlance, a type of “Other Health Impairment.” We are again reminded that students with Emotional Disabilities are often regarded as hyperactive.

Though on the surface the results are different, the clinical composite scale that generating the third highest percentage of comments and questions (7.7%) on the ages 12 to 21 teacher form, Conduct Problems is actually somewhat related to the third highest percentage on the younger form which was the Aggression (primarily of a verbal nature) scale. There are ten items measuring the Conduct Problems scale. As conceptualized by the BASC-3, the conduct problems scales measures “socially-deviant” and disruptive behaviors, and tendencies to engage in antisocial and rule-breaking behaviors, including cheating, stealing, lying and destroying property. In other words, behaviors that typically result in administrative discipline, including suspension and depending on the degree, expulsion.

5. Initial Conclusions and Limitations

These initial results provide a glimmer of hope that we are on the right track to begin to combat disproportionality in U.S. schools beginning with better preparing preservice teachers to not only understand their ethical and legal roles and

responsibilities under special education but also to question the lenses through which they perceive their increasingly diverse students. They had the most questions and comments on BASC-3 items that measure signs of mental and behavioral health disorders (e.g., ADHD and Autism), as well as, the federal special education disability categories of Emotional Disturbance and Intellectual Impairment, where males, students of color, culturally and linguistically diverse students and those from low-income households have historically and are currently disproportionately over-represented in special education identification as well as, in the disproportional administration of discipline.

These nascent results may seem promising on the surface, but are quite limited in their generalizability due to, among other things, the small size and lack of representativeness of this sample of convenience.

6. Next Steps and Future Directions

The analysis of the open-ended responses is underway and several themes seem to be emerging including: the need for more integrated (less “silo”) teacher preparation; increasing experiences to gain multicultural understanding, appreciation and competence; desire for explicit training and practice in classroom management and objective data-based decision making.

It is clear that we need to have more diverse voices and stories in teacher preparation. At this time, we are investigating more diverse documentary options, for example, *Paper Tigers*, to introduce the assignment to begin the discussion

and practice of observing and rating the behavior of middle and high school students who have racial, ethnic, cultural and linguistic differences from preservice teachers raters.

Another logical next step seems to be expanded teacher preparation using at least one or two other of the most common rating scales in schools, for example the Behavior Rating Inventory of Executive Functions, Second Edition (BRIEF-2).

A final (at least for the moment) next step would be to reach out and expand inquiry and training to public school psychologists in the communicates surrounding the University where this project was conducted.

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