

NARRATIVE REVIEW

IEP quality in focus: legal, research, and practical perspectives

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Abstract

Individualized Education Programs (IEPs) are crucial for the educational planning and service provision for students with disabilities (SWDs) in special education. Within the IEP, the Present Level of Academic Achievement and Functional Performance (PLAAFP) statement forms the basis for developing goals and interventions. Despite its importance, there is limited empirical research on the quality and consistency of PLAAFP statements. In this paper, we underscore the necessity of evaluating IEP and PLAAFP quality, tracing the evolution of special education laws and their impact on the academic and functional expectations for the individual progress of each SWD. By examining various IEP assessment rubrics and psychometric considerations, we highlight the relationship between IEP quality and student outcomes, as well as its implications for teacher preparation and retention amidst special education teacher shortages. With our findings, we advocate for further investigation into IEP quality to enhance outcomes for both SWDs and educators.

Keywords: Individualized Education Plan (IEP), Special Education, Education Policy, Progress Monitoring

IEP Quality in Focus: Legal, Research, and Practical Perspectives

Individualized Education Programs (IEPs) guide educational planning and service provision for students with disabilities (SWD) who access special education. Central to a high-quality IEP is the Present Level of Academic Achievement and Functional Performance (PLAAFP) statement, which lays the foundation for developing appropriate goals and designing relevant interventions (Yell et al., 2021). Despite the critical importance of the PLAAFP in shaping students' educational trajectories, there is limited empirical literature evaluating the quality and consistency of PLAAFP statements (Burns et al., 2023; Goran et al., 2020; Hott et al., 2021a). Therefore, the purpose of this paper is to establish the importance of measuring IEP and PLAAF

quality. We begin by describing the legal history of special education. Specifically, we will consider how legislation, policy, and case law transformed special education based on the expectation that SWDs demonstrate progress toward explicitly defined standards; to meet these standards, SWDs must have both high-quality instruction and a high-quality IEP (McLaughlin, 2010). We then address the complexity of measuring IEP and PLAAFP quality by describing examples of IEP assessment rubrics and by addressing psychometric considerations for interpreting such rubric-derived data.

Next, we provide context for this issue with two key strands. First, we outline how scholars have characterized the relationship between IEP quality and student characteristics and outcomes. Second, we will consider how advances in IEP quality research may influence teacher preparation and teacher working conditions, both of which have been linked to the shortages of special education teachers experienced across the country (Billingsley & Bettini, 2019; Mason-Williams *et al.*, 2020; Peyton *et al.*, 2021). Thus, we demonstrate that IEP and PLAAFP quality, respectively, merit further investigation due to their potential to improve outcomes for SWDs and their teachers.

History and Evolution of Special Education

Although the United States Constitution does not enumerate education as a federally guaranteed right, scholars have argued that education is a prerequisite for citizens to participate in the civic responsibilities necessary for a functioning democracy (Almond & Verba, 1989; Black, 2020). Notably, the United Nations General Assembly (UN; 1948) declared that public education is a human right, stating that education may empower individuals and promote understanding, tolerance, and peace among peoples. Nevertheless, the Supreme Court of the United States

ruled in *San Antonio Independent School District v. Rodriguez* (1973) that there is no constitutional right to education. Each state was thus vested with the autonomy to implement education policy. By the mid-1970s, millions of SWDs were either excluded from public education or received an inadequate education (Yell *et al.*, 1998; Zettel & Ballard, 1982) and were thus deprived of what the UN considered to be the human right to education. In 1975, the United States enacted federal legislation known as the Education for All Handicapped Children Act (EAHCA; PL. 94-142), mandating that all public schools provide free and appropriate public education (FAPE) alongside relevant services to SWDs in their least restrictive environment (LRE). This information is documented in the student's IEP to ensure SWDs receive services to which they are entitled. Initially, due to limited federal guidance, lower courts were tasked with interpreting FAPE (Zirkel, 2013), and the outcomes-based school reforms of the early 1980s, in conjunction with subsequent case law, would come to further refine interpretations of FAPE.

In 1981, Secretary of Education T.H. Bell convened the National Commission on Excellence in Education to investigate allegations that the educational system in the United States was lagging behind other developed countries (Good, 2010; National Commission on Excellence in Education, 1983). The goal of the Commission was to assess the relationship between secondary education and postsecondary employment (Good, 2010). After collecting a wide range of data, the Commission published *A Nation at Risk: The Imperative for Educational Reform* in 1983. This 30-page report was critical of the American educational system (Bell, 1988) and ended with the following five recommendations: (a) to standardize graduation requirements; (b) to adopt more rigorous standards for

academic performance; (c) to increase the time spent learning; (d) to improve teacher preparation; and (e) to emphasize the roles of leadership personnel (National Commission on Excellence in Education, 1983).

Scholars have suggested that *Nation* set the stage for such outcomes-focused and accountability-based educational reforms as those codified into the No Child Left Behind Act of 2001 and standardized into the Common Core Curriculum (Pajak, 2011; Sourdot & Janak, 2021; Young, 2018). Similarly, the reauthorization of EAHCA in 2004, known as the Individuals with Disabilities Education Act (IDEA; PL. 108-446), has drawn scholarly attention due to its amendments that emphasized the accurate and unbiased assessment of outcomes for SWDs (Ruble *et al.*, 2010b; Shriner *et al.*, 2013). Thus, legislators elevated the standard of FAPE by emphasizing outcomes for SWDs. In addition to these standards-based updates to federal special education law, case law has had a profound impact on interpretations of FAPE.

Two Supreme Court cases and one 6th Circuit Court case have issued rulings that have affected the interpretation of FAPE. The first Supreme Court case was the *Board of Education of the Hendrick Hudson Central School District v. Rowley* (1982). In this case, the family of a deaf student argued that she was denied FAPE because the school did not provide her with a long-term sign language translator. The student was, however, provided with other related services—including a short-term translator who did not believe the student needed his services—and the school argued that she was demonstrating academic progress. Therefore, the Supreme Court ruled that the school had provided the student with FAPE since the student was demonstrating progress toward meeting her IEP goals. The *Rowley* (1982) decision federally operationalized FAPE to mean that SWD must receive

some educational benefit, enabling local education agencies (LEAs) to argue that placement was sufficient to derive benefit. In other words, a student's LRE alone was enough to provide FAPE. The Supreme Court was careful not "to establish any one test for determining the adequacy of educational benefits conferred upon all children covered by [EAHCA]" (*Rowley*, 1982, p. 188). Consequently, lower courts were able to establish the minimum academic benefit necessary to confer FAPE to SWDs. Notably, the 10th Circuit Court of Appeals adopted the standard "merely more than de minimis" (*Endrew F. v. Douglas County Public School District*, 2015, p. 1342). However, this low standard was not universally accepted across the country, demonstrating differences in the approaches to providing FAPE nationwide (Yell & Katsiyannis, 2020).

Although the *Rowley* (1982) decision represented the first federal case law interpreting FAPE, the Court's ruling reserved the power to fully operationalize FAPE to lower courts; hence, subsequent judicial rulings have been necessary to provide additional clarity on the federal interpretation of FAPE. Thus, the *Endrew F. v. Douglas County Public School District* (2017) case was brought to the Supreme Court because a student with Autism was not making progress toward meeting his IEP goals despite working on the same set of goals for multiple years. As a result, the Supreme Court ruled that LEAs are required to show that SWDs "make progress appropriate in light of the child's circumstances" (*Endrew F.*, 2017, p. 15), rather than simply deriving educational benefits. With "appropriate" re-operationalized, there is an increased expectation of FAPE for SWDs (McKenna & Brigham, 2019; Sayeski *et al.*, 2019). Second, in *Gary B. v. Whitmer* (2020), several families sued Detroit Public Schools for depriving their students of a basic minimum education,

citing the widespread employment of long-term substitute teachers, dilapidated facilities, and inadequate instructional materials. The plaintiffs contended that these poor school conditions contributed to poor student achievement. Significantly, the federal court ruled in favor of the plaintiff and declared that a basic minimum education was a human right. Further, the Court operationalized a “basic minimum education” to include teaching, facilities, and educational materials (*Gary B. v. Whitmer*, 2020, p. 57), all of which are likely linked to student achievement. Taken together, the *Gary B.* and *Endrew F.* decisions raised the standard for providing FAPE. Thus, SWDs need to demonstrate sufficient progress, and SWDs need a qualified teacher and appropriate educational materials to receive the basic minimum education to which all students are entitled.

Since PL 94-142 was enacted, philosophies towards special education and interpretations of FAPE have changed broadly (e.g., Kurth *et al.*, 2021) and specifically (e.g., McKenna & Brigham, 2019; Zirkel, 2013). Simply, case law and federal legislation have shaped special education around the necessity that SWDs demonstrate progress toward rigorous standards in their LRE (Department of Education, 2022). To document the provision of FAPE, school personnel work with the student and their family to create an IEP; general and special education teachers must be prepared to implement the IEP (Rotter, 2014), making IEP quality a key issue for all educators. Accordingly, in the following section, we will consider how the IEP documents the provision of FAPE. First, we will outline the legal requirements of the IEP as they relate to progress monitoring. Then, based on commonly reported IEP errors, we will describe how IEP quality has been conceptualized by scholars.

The IEP to Document FAPE

An IEP consists of at least one quantifiable goal, a plan for measuring student progress toward that goal, and procedures for monitoring student progress (Yell, 2021). As it relates to FAPE, the IEP operationalizes the academic standards for the student and documents how the student will demonstrate meaningful progress. The IEP team considers the diverse strengths and needs of the SWD and makes judgments about how to implement the IEP. This team includes the SWD and their family, as well as their teachers and support staff (Gartin & Murdick, 2005). These judgments may attend to day-to-day decisions, such as the intensity of an intervention, or longer-term decisions such as planning the course sequence necessary to achieve the appropriate type of secondary diploma (e.g., modified, standard, advanced; Institution for Education Sciences, n.d.). Nevertheless, researchers have noted such judgments involve the possibility of error (Kauffman *et al.*, 2019); errors with IEP composition may result in a denial of FAPE and costly legal disputes between local education agencies (LEA) and families (e.g., Schanding *et al.*, 2017). Therefore, scholars have identified common IEP errors (Yell *et al.*, 2016) and used this information to inform what they believe constitutes a high-quality IEP (Yell *et al.*, 2021).

First, Yell and colleagues (2016) identified errors in the procedural and substantive information documented in IEPs. Procedural information refers to the processes that IEP teams must follow, such as sending prior written notice of IEP meetings, adhering to timelines, and implementing the IEP as written. Substantive information refers to the content of the IEP, including the measurable goals, PLAAFP statement, and accompanying progress monitoring data. The authors noted that substantive errors are more likely to result in a denial of FAPE. For example,

in *Roland M. v. Concord School Committee* (1990), the First Circuit Court of Appeals ruled that procedural flaws do not automatically constitute a denial of FAPE; however, if procedural flaws affected the substantive content of the IEP, this would constitute a denial of FAPE. Thus, there is a scholarly and legal precedent for considering the quality of the substantive content of an IEP. Accordingly, Yell and colleagues (2021) developed a rubric (i.e., assessment instrument; Jonnson & Svingby, 2007) based on hearing officer decisions from due process hearings targeting substantive errors in the IEP for identifying high-quality IEP goals.

Although low-quality IEPs may lead to legal disputes for their disallowance of FAPE (Blackwell et al., 2019; Mueller & Carranza, 2011), Ruble and McGrew (2013) noted that high-quality IEPs may predict student goal attainment. In so doing, these researchers have presented cascading implications for the present research. First, the ramifications of low-quality IEPs have manifested through legal disputes stemming from the denial of FAPE (Blackwell et al., 2019; Mueller & Carranza, 2011); on the other hand, there's an increasingly prominent silver lining to the discourse on measuring IEP quality. Ruble and McGrew (2013) underscored that high-quality IEPs have the potential to predict and possibly enhance student goal attainment. This dual perspective – the legal implications of subpar IEPs and the educational advantages of superior ones – reflects a broader evolution in the educational landscape. As our understanding of the link between IEP quality and student outcomes deepens, it is plausible to anticipate that the benchmarks defining the minimum standards for FAPE will ascend. Historically, the criteria for FAPE have been dynamic, adapting to the ever-expanding knowledge base and pedagogical advancements. Consequently, this research stands as

a testament to the pivotal role of high-quality IEPs in fostering better student outcomes and is undergirded by the notion that the evolution of FAPE standards is, and ought to be, intrinsically tied to our understanding of what constitutes an effective IEP.

Previous researchers have noted that adherence to procedural requirements alone (i.e., compliance) does not guarantee the development of a high-quality IEP (Boavida et al., 2010; Rowland et al., 2015). Further, compliance alone may not predict student achievement (Hawkins, 2012). Together, these findings reinforced the distinction between procedural compliance and IEP quality and indicated that IEP quality is more closely tied to the substantive content of the IEP. Therefore, for this paper, IEP quality will be operationalized as the quality of the substantive information in the IEP, with specific attention to PLAAFP statements. To do so, we must first consider the legislation and case law that directly link the PLAAFP statement to FAPE.

The PLAAFP to Document FAPE

According to IDEA (2004) §1414 (d)(1)(A), IEP teams must include a PLAAFP statement describing how the child's disability affects their involvement and progress in the general education curriculum. Two court rulings have highlighted the integral role of the PLAAFP in the conferral of FAPE to SWDs. First, in *Kirby v. Cabell County School District* (2006), the United States District Court for the Southern District of West Virginia emphasized the importance of the PLAAFP when they ruled that an IEP that does not assess a student's PLAAFP does not comply with IDEA §1414. The justices stated, "the child's level of academic achievement and functional performance is the foundation on which the IEP must be built" (*Kirby*, 2006, p. 694). Thus, special educators use the information from the PLAAFP to make decisions regarding a student's instructional programming to

prove that each SWD is receiving FAPE. Second, in *N.S. vs. District of Columbia* (2010), the judge noted that it is impossible to assess student progress without a PLAAFP statement. Together, these rulings require that each SWD demonstrate progress towards meaningful goals as outlined in their IEP and that each IEP must include a statement of PLAAFP to help the IEP team determine which educational and related services the student needs. Therefore, the FAPE mandate necessitates that SWDs demonstrate progress, and the interpretation of progress monitoring data is dependent upon the PLAAFP statement.

Although the IEP is composed of more than just the PLAAFP, there is a direct link between the conferral of FAPE and the PLAAFP statement. Special education researchers and policymakers may consider how to measure the quality of an IEP and PLAAFP statement, respectively. In the next section, we will use examples of existing rubrics to describe how scholars measure IEP quality and consider how to quantify the properties of such rubrics. Then, we will investigate how rubric-derived scores affect both student outcomes and the ability of teacher educators to train special education teachers to write high-quality IEPs and PLAAFP statements.

Measuring IEP and PLAAFP Quality

States are responsible for proving that an IEP confers FAPE (National Council on Disability, 2005). Given this requirement, policymakers and researchers have proposed several rubrics for measuring different components of IEP quality. Such rubrics have measured the quality of an IEP generally (e.g., Hott et al., 2021), the quality of IEP goals and objectives (e.g., McWilliam, 2009; Notari & Bricker, 1990), and the quality of a PLAAFP statement (e.g., Yell et al., 2021). Thus, researchers have generated expectations of IEP quality and assessed the degrees of quality for those expectations (Jonsson & Svingby,

2007). Taken together, scholars have developed rubrics to evaluate IEPs in terms of the quality of IEP goals (e.g., McWilliam, 2009), the quality of PLAAFP statements (e.g., Shriner & Carty, 2018), and overall IEP quality (e.g., Hott et al., 2021b), indicating that each of these constructs is discrete enough to merit individual attention.

The rubrics developed by Shriner and Carty (2018) and McWilliam (2009) provide two additional insights into the scholarly discussion of rubrics measuring IEP quality. First, each rubric had a different number of items (viz., seven vs. eleven) and used different scales (viz., four-point Likert-type scale vs. binary rating) to score the items. Although scores obtained from rubrics need to be highly reliable, if rubrics are over-specified (i.e., have too many scored items or have too wide of a range of possible scores) or too complicated, this will increase the probability of unreliability. Thus, special education researchers and policymakers must balance specificity with parsimony. Although tricky, doing so will center the accurate measurement of IEP quality alongside the feasibility with which this can be accomplished. In other words, the ideal rubric will be one that reliably and accurately captures IEP quality and one that IEP teams can use and interpret easily. This may support teachers with IEP composition to have cascading impacts on teacher self-efficacy regarding IEP management, and potentially reduce the burden of non-teaching duties on special education teachers. Second, the PLAAFP quality rubric (Shriner & Carty, 2018) was general enough to be applicable across various student ages and disability identifications, making this a potentially attractive tool due to its comprehensive utility. Conversely, although some of the items on the GFS-III refer to general aspects of high-quality goals (McWilliam, 2009), such as the acquisition criterion, generalization criterion, and timeframe (Hedin &

DeSpain, 2018), other GFS-III items, such as the emphasis on student routines, apply more directly to the needs of ECSE students (Boavida et al., 2010). Thus, notions of IEP quality may vary depending on student characteristics such as age and disability identification. Many IEP quality rubrics have been developed for students of various ages (e.g., Notari & Bricker, 1990; Lombardi et al. 2017) and disability identifications (e.g., Müller et al., 2022; Ruble et al., 2010).

To ensure that practitioners can effectively use the appropriate rubrics to support IEP development for a variety of students, special education researchers and policymakers may consider the properties of such rubrics. That is, through rigorous analysis, scholars may be able to provide evidence in support of the psychometric robustness of rubrics. Once the scores from a rubric are considered reliable and valid, then such data may be used in additional analysis to consider how the underlying construct (e.g., IEP quality scores) predicts external outcomes (e.g., student achievement, teacher self-efficacy). The veracity of the conclusions drawn from IEP quality research, therefore, depends upon the psychometric properties of the rubrics used to assess IEP quality. Before we can consider such research (i.e., what we claim to know about IEP quality), we must consider how we measure IEP quality (i.e., how we know what we claim to know).

Considerations for Measuring IEP and PLAAFP Quality

When attempting to measure a qualitative concept, such as IEP quality, scholars consider the psychometric properties of the scores obtained from the rubric. Psychometrics “provides a way to quantify the precision of measurement of qualitative concepts” (Utwin, 1995, p. 1). In psychometrics, the reproducibility of rubric-derived data must be

established before researchers can consider the extent to which those data accurately measure the intended construct (Utwin, 1995). In other words, without corroborating reliability estimates, the generalizability of inferences drawn from scores obtained from rubrics remains limited.

There are two primary ways that scholars discuss reliability. The internal consistency of the instrument indicates the degree to which the items measure the same construct, often measured by Cronbach’s α (Tavakol & Dennick, 2011). The consistency of the application of the instrument across users is calculated as either interrater reliability (IRR) or interrater agreement (IRA; Gisev et al., 2013); the latter is commonly estimated in IEP quality research (e.g., Catone & Brady, 2005; Hill, 2004; Müller et al., 2022). Further, scholars have recommended calculating and reporting multiple reliability estimates to demonstrate the comprehensive consistency of the instrument (Hallgren, 2012; McHugh, 2012). Specifically, Hallgren (2012) noted that IRA alone may not be a robust indicator of reliability as it fails to account for agreement expected due to random chance. Thus, scholars may consider how to conduct rigorous psychometric development of IEP and PLAAFP quality rubrics to ensure that practitioners employ such rubrics with relative ease. Moreover, considering the psychometric properties of the scores obtained from rubrics may contextualize the conclusions drawn from such data. Using this lens, we will next describe how IEP quality research has been related to student and teacher outcomes, respectively. In so doing, we hope to present these results with both caution regarding the psychometric evidence and optimism for the future of IEP quality research.

Research on IEP Quality and Student Outcomes

Though researchers have made connections between IEP quality and student outcomes (Hott et al.,

2021a; La Salle et al., 2013; Pretti-Frontczak & Bricker, 2000; Ruble & McGrew, 2013), the quantity of such research is limited and the results are mixed (Mitchell et al., 2010). For example, using a researcher-created rubric to grade IEP quality, Ruble and McGrew (2013) found that IEP quality significantly predicted a student's goal attainment, accounting for 34.7% of the variance in the dependent variable. Conversely, using a different researcher-created rubric to assess IEP quality for SWDs that scored proficient on the Indiana Statewide Testing for Educational Progress, LaSalle and colleagues (2013) noted that IEP quality demonstrated a limited association with student performance on a statewide assessment. Both the IEP quality rubric and the criterion differed across studies, underscoring the heterogeneity in this research.

These studies present several implications for research and practice for both SWDs and their teachers. First, there is a need to review the empirical literature for research on IEP quality. Specifically, each study used a different rubric to measure IEP quality, indicating that additional research may be needed to consider the features of the various rubrics designed to measure IEP quality. Moreover, each study used a different student outcome as the dependent variable. Researchers may investigate which features of the IEP rubric are appropriate for students of varying ages and disability identifications. Then, researchers may consider how to relate specific rubrics to a variety of student outcomes. Therefore, considering the components of the IEP and how to measure the quality thereof is an important topic that may assist IEP teams, and specifically educators, in improving their provision of FAPE to SWDs.

IEP Quality, Teacher Preparation, and Special Education Teacher Shortages

IEP composition is a key responsibility for special educators, and all educators are responsible for IEP implementation (Rotter, 2014; Will, 1986). Further, managing IEPs and ensuring compliance with IDEA are key responsibilities for special education teachers; however, scholars have suggested that special education teachers find such non-teaching duties burdensome and may contribute to attrition (Billingsley & Bettini, 2019). This is critical because there are well-documented shortages of special education teachers across the country (Mason-Williams et al., 2020; Peyton et al., 2021) and teacher attrition may negatively affect student academic outcomes (Ronfeldt et al., 2014) and the overall quality of the teaching staff at the school experiencing turnover (Sorensen & Ladd, 2020). On the other hand, researchers have suggested that high-quality teacher education may have positive effects on teacher retention (Ingersoll et al., 2012; Ronfeldt et al., 2014) and that more effective teachers are also associated with higher retention rates (Feng & Sass, 2017; Goldhaber et al., 2011). As such, teacher preparation program personnel might consider how conceptions of IEP quality influence teacher preparation in a time of widespread teacher shortages. As scholars refine notions of IEP quality, teacher preparation and professional development may become increasingly specified.

Investigating IEP quality for a variety of student populations may benefit special education teacher preparation by providing special educators with more condition-specific scaffolds to support IEP composition. Specifically, researchers have noted that teasing out the salient features of a quality IEP may enable the development of scaffolded IEP software (Müller et al., 2022), which may decrease the burden

of paperwork on teachers, allow for the flexible modification of goals, and ensure federal compliance (More & Hart-Barnett, 2014). Therefore, additional research on IEP quality could enable stakeholders to more efficiently streamline the way IEP-related data are collected and recorded. More research on rubrics measuring IEP quality is thus warranted. Such research holds the potential to directly improve outcomes for SWDs and concurrently simplify IEP development for special educators, thereby improving working conditions, mitigating turnover, and combating nationwide teacher shortages.

In the absence of such research and software, special education teachers must have the skills to develop IEPs for students across a spectrum of strengths and challenges. Such skills include the collection and interpretation of individualized progress monitoring data necessary to compose PLAAFP statements and create IEP goals. When done correctly, researchers have suggested that such data-based decisions, specifically those that include rules based on graphical representations of student data, may result in positive effects on academic outcomes for SWDs (Carter et al., 2020; Kuntz et al., 2023). However, scholars have noted that special educators may not be able to connect the importance of their teaching practices with special education law (Markelz et al., 2022), and special education teachers have reported challenges making decisions based on progress monitoring data (Espin et al., 2021). Accordingly, teacher preparation programs should explicitly emphasize data literacy and the practical application of legal frameworks, ensuring that future educators are equipped to make informed, legally

grounded decisions that enhance IEP quality and improve outcomes for students with disabilities.

In light of the aforementioned legal requirements and the difficulties experienced by some special educators, professional organizations have

developed standards for teacher preparation and professional development to ensure their graduates have the skills to assess a student's progress toward their IEP goal(s). Specifically, Key Element 4.2 in the Standards for Initial Special Education Preparation states that special education teacher candidates "use knowledge of measurement principles and practices to interpret assessment results and guide educational decisions" (Council for Exceptional Children, 2015). Further, the Interstate Teacher Assessment and Support Consortium emphasizes that teachers must interpret student performance data to monitor progress and guide planning (Council of Chief State School Officers, 2013). The systematic use of such assessment data to provide appropriate interventions and modifications to programming is considered a high-leverage practice in special education teacher preparation (HLP 6; Council for Exceptional Children & CEDAR Center, 2017; Fuchs et al., 2021). Thus, additional research on IEP and PLAAFP quality could refine standards for teacher preparation, improve the quality and specificity of teacher preparation, and ultimately reduce special education teacher attrition. Regardless, IEP and PLAAFP quality are complicated topics and more research is needed to investigate the link between such quality scores and student and teacher outcomes.

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