

## What Makes an Excellent Teacher? Insights From Junior High School Students With a History of Disruptive Behavior

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Evidence of the powerful relationship between what teachers do and how effectively their students learn has led to reforms aimed at improving the guality of teaching. Most jurisdictions are now paying increased attention both to the initial and ongoing education of teachers, as well as methods to assess, reward and improve quality teaching. Predominant among these methods are frameworks that define observable elements of pedagogical practice for which there is evidence of benefit for student learning, engagement, and behavior. However, we contend that even the best of these do not go far enough, as they do not explicitly consider students with disability, even those students with so-called "high-incidence" disabilities enrolled in everyday classroomssuch as those with Attention Deficit Hyperactivity Disorder and Developmental Language Disorder-whose classroom behavior often indicates that their learning needs are not being met. In this manuscript, we report findings from in-depth interviews with 50 Grade 7-10 students with a history of disruptive and disengaged behavior from three secondary schools serving disadvantaged communities. Responses to the question "what makes an excellent teacher" were coded into four categories. Three of the four categories (emotional support, classroom organization, and instructional support) reflect internationally accepted domains of quality teaching, while the fourth, teachers' temperament and personality, was added to gauge accuracy of the common belief that this is the element students care most about. Analysis yielded novel results with the majority of students emphasizing instructional support practices that are not well represented in most measures of quality teaching. We argue that these practices represent an essential-but often absent-"top layer" of clarity and accessibility that is necessary for "quality teaching" to be inclusive teaching.

Keywords: inclusive education, instructional support, quality teaching, student perspectives, disruptive behavior

## INTRODUCTION

Teaching quality has received a great deal of attention over the last two decades with a range of large-scale studies seeking to understand which instructional elements most benefit students' academic and/or social and behavioral development with the aim of enhancing teachers' practice through initial teacher education reform and targeted professional development (Singh et al., 2019).

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The conception and definition of quality teaching, however, has not been sufficiently interrogated and is conceptualized and defined differently across countries, literatures, discourses, and studies. In some large-scale studies that have been used to justify reforms to initial teacher education and teacher performance assessment, quality is "a euphemism for teacher effectiveness, which is predominantly measured indirectly using student test scores" (Graham et al., 2020, p. 2). Yet this is an impoverished conceptualization of teaching that ignores the complex relationship between academic achievement, individual difference, and classroom composition (Fauth et al., 2021). More sophisticated conceptions of quality-which acknowledge the interdependence of academic, social-emotional and behavioral developmental domains and the inherent complexity of teaching-exist and have been operationalized through various frameworks. Two well-known examples include the Danielson Framework for Teaching (FFT; Danielson, 2007), and the Classroom Assessment Scoring System (CLASS; Pianta et al., 2008), however, these frameworks are used predominantly in the United States and international researchers have questioned whether some aspects of North American frameworks, like the Emotional Support domain of the CLASS, may be "culturally bound" making them less appropriate for international contexts, like Australia, "where teachers may be more emotionally reserved than their American counterparts" (Graham et al., 2020). The International Comparative Analysis of Learning and Teaching (ICALT) observation tool is another example of a quality teaching measure (van der Lans et al., 2019), however, the ICALT originated in Europe and, unlike Marzano's (2007) Art and Science of Teaching (ASoT)-another framework that originated in the United States and which has been widely adopted in the Australian state of Queensland (Simon et al., 2021)-does not appear to have traveled far from Europe. Cognizant of the importance of Australia's unique social and cultural context, Australian researchers have over the last two decades developed Productive Pedagogies (Lingard et al., 2003), and the Quality Teaching Framework (QTF; NSW Department of Education, 2003), both with roots in Newmann and Associates' research on authentic pedagogies of the late 90s, which also originated in the United States (Lingard, 2007).

Each of these frameworks, in different ways, define key elements of teaching important for student learning, and provide a means to recognize and enhance teachers' proficiency through observation, coaching and/or professional learning communities. However, while the relationship between what teachers do and how well students learn is a central focus, each framework is broad, and none-aside from perhaps the ICALT which includes two relevant domains that focus attention on "clear and structured instruction" and "differentiation"-goes to the level of granularity necessary to identify and promote practices that represent quality for students with high-incidence disabilities who are present but poorly served in everyday classrooms. This is a core weakness of measures of quality teaching more broadly, which we suspect is due to common assumptions about who is being taught in everyday classrooms and what "quality" means for them. We are not the first to observe this gap. In a recent systematic content analysis of Danielson's FFT, for example, Morris-Mathews et al. (2021) argue that the FFT positions constructivist teaching as a proxy for quality instruction, a decision that is underpinned by Danielson's assumption "that all students have the expertise necessary to design and direct their own learning" (p. 74). Many students with high-incidence disabilities-such as those with Attention Deficit Hyperactivity Disorder (ADHD) and Developmental Language Disorder (DLD)-however, have core difficulties with executive function and cognitive processing (Graham and Tancredi, 2020), which places them at a distinct disadvantage when teachers employ teaching approaches that require students to plan, organize and direct their own learning. Morris-Mathews et al. (2021) further note that teacher-directed instruction, which is necessary for students with any form of disability affecting cognitive processing, including those with ADHD or DLD, "is situated at the unsatisfactory and basic levels of performance" (p. 72), while "practices known to reduce cognitive load ... appear rarely in the rubrics" (p. 72).

Importantly, Morris-Mathews et al. (2021) argue "if observation tools are driven by specific theories of teaching and learning, the pedagogical norms underlying these tools likely shape the ways teachers construct their practice" (p. 66) and, as such, may result in the overlooking of "approaches and practices that are most effective or harmful for particular groups of students" (p. 66). We concur and observe that while some pedagogical frameworks may make reference to "students with special needs" (ASoT) or "inclusivity" (QTF, Productive Pedagogies), all are inadequate to the task. Firstly, "inclusivity" is a loose term that appears, in these instances, to be weighted toward social and cultural inclusion, rather than inclusive education as defined in General Comment No. 4 on Article 24 of the Convention on the Rights of Persons with Disability (CRPD; United Nations Committee on the Rights of Persons with Disabilities, 2016). Secondly, neither framework approaches quality-first teaching with the degree of quality necessary to include students with high-incidence disabilities (Formosa and Dixon, 2004), even though the majority are educated in everyday classrooms and by regular classroom teachers. Readers may have noticed that we invoke a new term in this manuscript, "everyday classroom." We have done this for two reasons: first, to bring attention to the term "mainstream"-for this is a problematic concept that both reflects and perpetuates the interdependence of parallel (general/special) systems of education; and second, to describe a typical Australian classroom; one in which there are students with disability, particularly those with high-incidence disabilities, like ADHD and DLD, but where integration is the norm and not genuine inclusion, as defined by General Comment No. 4 to the CRPD (see Chapter 1 in Graham, 2020).

Research on teaching quality is typically conducted in mainstream schools, using broad measures derived from largescale observational studies, which are themselves a product of the students, teachers, and interactions within those environments (Brownell et al., 2020). While these classrooms will have had students with learning difficulties or disabilities within them, no study to our knowledge has disaggregated for students with and without these differences to determine whether quality for *most* equals quality for *all*. Some students, however, experience more difficulty with learning and therefore practices that "work" for most students may not work for them (Morris-Mathews et al., 2021). These students tend to be the focus of researchers in special or inclusive education and not general education researchers, despite many of these students being in general education classrooms; at least, until they are segregated into special classes or schools for disruptive and disengaged behavior. Given that so many of these children and young people begin and end their schooling in general education classrooms, conceptualizations of quality teaching must be inclusive of the practices necessary for these students to engage with the curriculum and learn as optimally as possible from their classroom teachers' instruction.

Again, we are not the first to identify the gap created by "mainstream" conceptions of and approaches to quality teaching. For example, special education researchers in Australia's largest education sector, New South Wales, where funding for professional learning was tied to implementation of the QTF across all settings, developed an "add-on" aimed at supporting teachers of students with disability in a bid to avoid teachers of students with intellectual disabilities being unfairly assessed as engaging in "lower quality" teaching (Stephenson et al., 2007). The need for this action resonates with the points raised by Morris-Mathews et al. (2021), which is that "mainstream" conceptions of quality are not only inadequate for focusing on a level of quality that is inadequate for the full range of learners present in everyday classrooms, but they risk privileging forms of practice that exclude a large minority of students from learning, as well as frame as deficient teachers who engage in explicit, teacher-directed teaching practices in an effort to reach and teach these students well. Together these examples and absences prompt an important question, which is whether the empirical research on which respective conceptions of quality teaching, and the frameworks on which they are based, are sufficiently broad and inclusive of learners for whom the dominant conception of "quality" might not be good enough? And how do we know if that research has not sought the perspectives of those students themselves?

# Why Seek (All, but Distinguish Between) Students' Perspectives?

Student perspectives of their school experience may differ to the perspectives offered by others in the school community such as teachers, principals, and parents. Their perspectives therefore provide invaluable insights that cannot be obtained by other means. In the same way that adults and students may have different views and perspectives on different aspects of their experience, student views may also differ from one another. Methodological approaches that aggregate the voices of diverse representatives may mask important differences between groups, whereas disaggregation might reveal whether and why common schooling practices "work" for some but not for others (Graham et al., 2022). This is as relevant in the conceptualization and measurement of quality teaching, as it is for any other practice. Incorporating the views of students also provides a different way to resolve difficulties and incidents, as "they are able to throw light upon the causes and nature of learning and behavior

difficulties that might be overlooked or not mentioned by teachers" (Cefai and Cooper, 2010, p. 184). This is particularly so in the case of students with disabilities whose voices are less often represented in research, with their interests instead put forward by other stakeholders including researchers, advocacy groups, parents, teachers, principals, adults with disabilities, and peers without disabilities (Byrnes and Rickards, 2011). Importantly, these students are not a homogenous group, and "conformity of viewpoint is not irrevocably consistent [even] across individuals with the same disability status" (Byrnes and Rickards, 2011, p. 27). This is yet another reason why it is important to seek diverse views.

The reasons that the perspectives of some students are sought over others are wide and varied. According to Byrnes and Rickards (2011), less attention is paid to the voices of students with disabilities compared to their peers because some adults:

- Question the "credibility and trustworthiness" of students' perspectives.
- Consider students with disabilities "ineffective informants" or threats to teacher authority.
- Perceive that there is less accountability and transparency required of educational services for students with disability than for students without disabilities.
- Do not have the skills or resources to canvass students' views.

Cefai and Cooper (2010) add that the perspectives of students with social, emotional and behavior difficulties and school staff, "are likely to be in conflict" (p. 183) with one another, which may make the views of these students less appealing to seek, particularly if the views are about the person seeking them. This reflects the tendency in schools to attend to the voices of students "that speak the "palatable" language of the school in contrast to those voices that are seen as "incomprehensible or recalcitrant" or as "aggressive, rude or obnoxious" (Finneran et al., 2021, p. 2).

However, Byrnes and Rickards (2011) highlight the contribution that the perspectives of students with disability can make to professional practice. In a strong rebuttal of deficit conceptions, they cite several studies that demonstrate the capacity of students with disabilities to "coherently articulate their viewpoints and render information about their experiences" (p. 25), and advocate for more studies to include the perspectives of students with disability. They describe additional benefits of including the perspectives of students with disabilities in the evaluation of school processes, procedures, and educational supports (e.g., use of teacher aides, resourcing, access), to support teacher professional development and practice, and for school improvement processes that are inclusive and better cater for the diversity of all their students. Student benefits include increased involvement in school and empowerment through the opportunities provided, personal skill development and capacity building-particularly in areas of leadership and citizenship, being provided the same opportunities as their peers without disabilities to provide input into school curriculum and pedagogy, and feeling a greater sense of connectedness, belonging, and commitment to school. Notably, when the voices of students with disability are sought about their educational experiences, they somewhat consistently point to problems of practice, including student experiences of behavior management (Sellman, 2009; Dimitrellou and Male, 2019), relationships with teachers (Cefai and Cooper, 2010; O'Connor et al., 2011), or views of the curriculum as "boring" (Cefai and Cooper, 2010; Connor and Cavendish, 2020). Very few studies, however, probe the *quality* of teaching from the student perspective, and we could only find three that included the voices of students with disability.

# Students' Perspectives of Quality Teaching

Although the literature base is not extensive, there are some recent contributions that are relevant to this topic. Again, however, most "universalize" experience and treat all students as though they are the same. For example, Hirsh and Segolsson (2021) conducted focus groups with 102 Swedish secondary school students aged 16-18 years across 10 municipalities to understand, "what characterizes, from the students' perspectives, the teaching actions of teachers they perceive as being really good teachers" (p. 35). Students were not randomly recruited but were instead identified by 20 participating classroom teachers from 20 different schools, who themselves were involved in the project as the result of being nominated by school principals as "their most successful teacher" (p. 39). Students of these teachers were interviewed in groups of 4-6 and asked two general question stems, each with follow up prompts. The first question stem was "How would you describe a really good teacher? What distinguishes a good teacher from one who is not so good?" The second question stem probed the same topic in a different way by asking "What characterizes teaching that you think leads to learning and development?" The authors applied a thematic approach to data analysis and coded the focus group responses into eight descriptive categories. According to the students participating in this study, really good teachers: (1) create safe learning environments, (2) respect students in a manner that makes students respect them, (3) are passionate about teaching and student's learning, (4) communicate that learning is a shared responsibility, (5) see and adjust to the individual, (6) build lessons that create motivation, (7) communicate that learning is possible for all, and (8) emphasize the use-value of knowledge rather than formal requirements.

While Hirsh and Segolsson (2021) state that the "volunteering students together represented a great span of knowledge and individual needs" (p. 40), Sweden has invested heavily in free schools over the last decade and has many segregated settings for students with disability, including for students with Attention Deficit Hyperactivity Disorder (Malmqvist and Nilholm, 2016). How inclusive the classrooms in the Hirsh and Segolsson study were, and therefore how representative the volunteering students' perspectives can be, is unclear. Also, although the eight categories derived from the focus group data speak strongly to the relational abilities of teachers, the question remains as to how these findings might differ if the participant sample included the students of teachers *not* considered successful teachers by their principal or if

the sample included academically "at risk" students, who receive less teacher attention and differentiated instruction than students with or without a disability (McGhie-Richmond et al., 2007).

Posing the question, "Is "good" teaching always good teaching, or is it dependent on the students with whom an individual teacher works?," Blazar and Archer (2020) investigated the relationships among teachers, teaching practices, and student outcomes, and how outcomes differ across three groups (general education students, English language learners, and students with an Individual Education Plan who receive special education services), using a large dataset with 310 fourth and fifth grade elementary school teachers and 10,575 children across four urban school districts in the United States. Teaching quality in mathematics classrooms was measured using the Classroom Assessment Scoring System (CLASS; Pianta et al., 2008), a tool for measuring the quality of classroom interactions based on observations conducted in 4,000 general education classrooms in the United States, and the 10-item Ambitious Mathematics Instruction Scale from the MQI observation instrument (Learning Mathematics for Teaching Project, 2011). The premise of the study was to test whether all students learn equally well from conceptually demanding or constructivist approaches to the teaching of mathematics, due to concern that English language learners and those with IEPs "may struggle without additional academic supports and some degree of explicit, direct instruction" (p. 306). The study did find conceptually based teaching has benefits for all students, however, differences between groups based on the outcome examined suggests that further adaptations could increase potential benefits. Since the CLASS and MQI generalized across populations, the authors also concluded that their study "disconfirms a need for specialized tools or protocols to observe the instruction of general education teachers ... of students with special needs" (p. 306). However, given that their research design uses only these measures which were developed in general education classrooms and does not compare those measures with alternatives, the study cannot account for other factors that may be differentially important for these student groups, but which were not measured.

While Blazar and Archer (2020) appear to have answered the question of whether constructivist teaching-as conceptualized by and measured by the CLASS-benefits English language learners or students with a disability, the question remains as to whether their learning would be further enhanced through refinements in practices that are important for these students, but which are either not currently captured by existing measures or which need to be delivered at a level of frequency and intensity that existing measures do not detect. The CLASS, for example, includes Clarity of Learning Objectives as an indicator of teaching quality in the Instructional Support domain. Observers rate this indicator as to whether the teacher "effectively focuses students' attention toward learning objectives and/or the purpose of the lesson" (CLASS K-3 Dimensions Overview, 2008, p. 8). Similarly, in the Quality of Feedback dimension, quality is based on evidence of "frequent conversations in the classroom," "the teacher asking many open-ended questions," and "often using advanced language with students." However, the CLASS does not specify *how teachers can best* ask questions, deliver instructions, or use advanced language while still supporting students' vocabulary development. Further, while the CLASS devotes attention to teachers' use of routines in the Classroom Organization domain, the focus is on behavior management and the use of routines, cues and gestures to support catch and maintain students' attention to support language and information processing is not a feature of the tool. In other words, existing measures of teaching quality do not assess the *accessibility* of teaching by proactively supporting cognitive processing, whilst also reducing cognitive load, and this, we argue, is a necessary additional layer for *inclusive* quality teaching.

# What Do Students With Disability (When Included) Say Helps Them to Learn?

In the Manitoba province of central Canada, a jurisdiction where students with disability are fully included alongside their same-aged peers, Katz and Sokal (2016) investigated students' perspectives on their teachers' use of the Three Block Model (TBM) of Universal Design for Learning (Katz, 2012). Fiftyone teachers engaged in a 5-day professional development program, focused on the three pillars of TBM: students' socialemotional wellbeing, teachers' use of differentiated instruction, and inclusion within a whole school model. A total of 101 students (one to two students per teacher involved in the program) were interviewed pre- and post the teacher training and implementation of TBM. Of these students, 11 had a diagnosed disability. Students were asked whether or not they liked school and questions such as "what is learning?" and how they learned best. Students' responses were not disaggregated, and reported interview data did not therefore separate the views of students with and without disability. Nonetheless, when asked about how they learned best, students' cited teacher-directed activities, such as giving demonstrations, and teacher supports, "when the teacher explains it very well so that I understand" (pp. 49-50), as well as reduced classroom noise and learner-centric behaviors (e.g., "by paying attention," p. 49). While this study provides some insight to students' views on the impact of changes in teacher pedagogies, limited research attention has been given to students' views on the specific nature, frequency, and effectiveness of practices that students with high-incidence disabilities say support their learning.

One exception is a recent qualitative study by Connor and Cavendish (2020) which involved 40 high school students with learning disabilities (including those with spoken and written language disorders, emotional/behavioral disorders, and intellectual disabilities) in the United States. Connor and Cavendish sought to investigate students' perspectives on the traits and/or activities of effective and ineffective teachers, and what these students' wished teachers knew about how they learn. Students were asked "what makes an effective or good teacher? What types of things do they do in class to help students learn?" (p. 292). Data were analyzed using grounded theory, with students' perspectives falling into two broad categories: teacher characteristics (or traits) and pedagogical practices (activities). In relation to teacher characteristics, students indicated that "good" teachers are positive, supportive, and empathic, accepting of difference, generous with their time, receptive to student feedback, and "firm, fair, and fun" (p. 296). Students also reported that "good" teachers are those that use multi-modal teaching approaches, question-answer episodes for engagement and comprehension checking, who give clear explanations, maintain a reasonable pace when moving through curricular content, and provide personalized support to students who require it.

While the findings of Katz and Sokal (2016) and Connor and Cavendish (2020) provide important insights on the characteristics of quality teachers that students with learning disabilities say help them to learn, their descriptions of practice are broad. As a result, it is likely that there is insufficient detail to inform practice, let alone guide the evaluation of practice. For example, multi-modal teaching approaches can be adopted in ways that support learning-or in ways that detract from learning-for all students (Sweller, 2005), but the risk may be heightened for students with disability. Research into quality teaching therefore needs to determine the *degree* of instructional quality required by students from the general population, and whether that degree is different to the degree required by students with a disability, or indeed by different groups of students with disability. This study extends the literature on quality teaching by focusing on students who come to the school's attention for behavioral difficulties, however, it is welldocumented that these students often have underlying (and likely undiagnosed) language, literacy, attention and/or executive function difficulties (Ripley and Yuill, 2005; Helland et al., 2020). Given that students in this group tend not to receive additional support, and experience conflict with teachers and high rates of exclusionary discipline (Graham and Tancredi, 2020), it is critical-at a time when excellence in teaching is being sought, defined and measured by researchers, professional associations, employers and governments-to learn what these students believe makes an excellent teacher and whether they emphasize teachers' personality and temperament, the relational aspects of teaching, their ability to manage the classroom or their ability to help students to learn.

## MATERIALS AND METHODS

### Procedure

Ten schools servicing disadvantaged communities in Southeast Queensland, Australia were initially approached to participate in the study with the aim of recruiting two "intervention" schools and one "control." The first three schools to consent (Schools A, B, and C) were recruited into the study. However, School C withdrew after students completed the Phase 1 survey, and a fourth school (School D) joined for the Phase 2 student interviews and Phase 3 pedagogical intervention. All participating schools had an Index of Community Socio-Educational Advantage (ICSEA) either on or between 1 and 2 SD below the national mean of 1,000 (see **Table 1**).

School ID	Enrolments year 7–12	Language background other than English (%)	Indigenous (%)	ICSEA range (2017)	Lowest ICSEA quartile (%)	"Brains Trust" student interviews (n = 50)
School A	700+	2	12	900–999	58	15
School B	1500+	12	15	900-999	52	20
School C	500+	23	8	1000-1050	25	-
School D	900+	44	12	800-899	68	15

TABLE 1 | School demographics and distribution of student participants.

#### **Participants**

As school principals in Queensland are familiar with the Positive Behavior Intervention Supports (PBIS) model, the School Leadership Team in each of the three schools was asked to nominate students in the behavior "red zone" using incident data from their school's data dashboard. The researchers provided project information statements and written invitations to parents of 73 nominated students that asked consent for their young person to join a "Brain's Trust": a group of student experts who could help the research team identify "push factors" and "pull factors" that might contribute to student dis/engagement, disruptive behavior, conflict with teachers, and exclusionary discipline.

A total of 50 students aged between 12 and 16 years in Grades 7–10 consented to participate. Nine were in Grade 7 (18.0%), 13 in Grade 8 (26.0%), 21 in Grade 9 (42.0%), and seven in Grade 10 (14.0%). Thirty-five students were from Schools A and B, and 15 from School D. As students from School D were recruited later than those in Schools A and B, the team was able to conduct preliminary analyses and developed a visual resource to test our interpretation of emerging themes with these 15 students.

#### Instruments

All 50 students were asked questions relating to their attitude toward schooling, what they like/dislike about school, their perspective on their relationships with teachers, and teaching practices that make it easier (or harder) to learn. Each initial interview lasted approximately 25 mins and consisted of up to 59 questions in total. Semi-structured prompts were offered by the interviewer to clarify or extend students' responses. This manuscript analyses participants' responses to the question "What makes an excellent teacher?," which was followed by the prompt, "What do those teachers *do* and how does it help you to learn?" We chose the word "excellent," rather than "good," due to the prevalence of the term "excellence" in public discourses about teaching quality. Interviews were audio-recorded and transcribed verbatim by professional transcribers.

## **DATA ANALYSIS**

#### Think of an Excellent Teacher...

All 50 students who were interviewed were asked to think of an excellent teacher and, once they had responded, they were asked to describe what that teacher does to help students to learn. Despite the framing of the first question, only 27 students (54%) responded by naming and discussing specific teachers, while the remaining 23 students (46%) instead generically described elements of good teaching. Importantly, the majority of students who invoked specific teachers did not just "like" the teacher because they were a nice person but explained *why* they thought that teacher was excellent by describing an element of that teacher's approach to teaching. A clear example of this was provided by a student in Grade 10 at School C, who responded to our request to think of an excellent teacher, saying:

I think my humanities teacher, even though I clashed with her. I think she's a good teacher. She does care about her students. She stays on top of her students. She does do it in an annoying way, but it's for a good reason, like she's not just doing it just to be annoying. She offers to help during lunchtime, or after school (Grade 10, School C).

This student's comment is like that of many other students in the sample because of the way it conceptualizes "care." When students used the word "care," our coding depended on the context of their statement. Invocation of care, in the example above, was interpreted by the explanations that followed and coded into *both* Classroom Organization (stays on top of her students) and Instructional Support (she offers to help). Interestingly, every time teacher care was invoked, students typically intuited care as help with understanding and learning, and not simply emotional (or relational) care.

They care about me. They put me first, kind of, in front of them. They're on their laptop doing their work and they'd push that aside to help me. I understand it more. I listen, I focus on things because they push that [work] aside (Grade 8, School A).

Yeah, Miss T. She's always showing us that she cares about us and always trying to help us better ourselves to benefit ourselves. She puts in more effort than she has to. If we're having trouble learning, she'll always say, if you have any more problems at all, put your hand up, I'll come straight to you and help you out with all your work. Just stuff like that, just really helpful stuff in the classroom (Grade 8, School A).

The above exemplars demonstrate not only how students relate teacher care to academic support, but also how much they recognize those teachers' efforts: "they put me first kind of, in front of them" and "she puts in more effort than she has to." It is important to recall at this point that these students were those identified by their principals through behavior incident data as having a history of disruptive behavior, multiple detentions, suspensions and/or expulsions, and conflict with teachers. Given the nature of this population and their age, it is unlikely that this appreciation was expressed or that these teachers knew that their students both saw and appreciated their efforts in this way. We believe this research makes an importance contribution by tapping into the perspectives of students whose views are often not sought or which are sometimes dismissed and by affirming the important work of supportive and inclusive teachers.

### **Unpacking Excellence in Teaching**

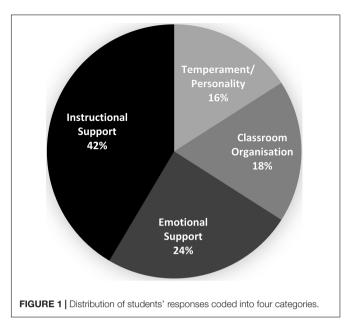
There is general agreement among researchers that teaching quality has three basic dimensions: supportive emotional climate, classroom management, and cognitive activation (Fauth et al., 2019). These are described differently in literature using other observational tools, and our coding was informed by the first author's familiarity with the CLASS (Pianta et al., 2008), which describes these three domains as "emotional support," "classroom organization," "instructional support." To these three categories, we added "temperament/personality."

Practices that reflected dimensions within the Emotional Support (ES) domain, like Positive Climate, Teacher Sensitivity or Regard for Students Perspectives, were coded ES. An example is "Those two teachers they're actually respectful to students no matter what. They're always asking if everyone's okay and they're always just - you get a vibe from them easily. They don't come off as like a nasty teacher" (Grade 10, School C). The Classroom Organization (CO) domain of the CLASS encompasses Behavior Management, Productivity, and Instructional Learning Formats (e.g., variety of materials and modalities). An example of a comment reflecting behavior management that was coded into CO is "[They] give me warnings. They don't get as cranky as fast. I don't know how to say it. They give you a fair go." (Grade 9, School C). The Instructional Support (IS) domain comprises Concept Development, Quality of Feedback, and Language Modeling. An example of a comment that was coded into Instructional Support is "Honest feedback. So, I know what I need to improve on." (Grade 9, School C). An example of comments coded into Temperament and Personality is "He's just a good fun person" (Grade 8, School A).

As some responses could be coded into multiple categories, the number of responses does not represent the number of participants, rather how commonly or not student's described practices relevant to these four categories. Details that could not easily be coded into these categories were captured by the category "Other" which included, for example, "Them being really nice to you and helping you out, and giving you candy." This whole response was divided into statements which were coded separately into emotional support (being really nice to you), instructional support (helping you out), and other (giving you candy). Responses from our 50 participants could therefore be divided and coded into 93 statements. As only three responses were coded into the Other category, our analyses focus on the 90 statements that were coded into emotional support, classroom organization, instructional support, and temperament/personality (see Figure 1).

#### **Temperament and Personality**

When the 90 statements were coded across the four categories, only 16.1% of statements related to teachers' temperament or personality, like being good-natured, bubbly, relatable or fun.



Miss M. Just her, like just the way she is. It's just bubbly, she's always making people laugh. It's just so good; she's such a good teacher (Grade 10, School C).

Students reflected that they notice when teachers have an enthusiastic presence in the classroom, saying: "Well Mrs. E and Miss B you can tell that they enjoy what they do, kind of thing. Like they're really upbeat" (Grade 8, School A). Further, teachers who students enjoy being around can positively impact students' engagement and learning: "Mr. H. He's just a good fun person. Motivates me to perform well" (Grade 8, School A) and "Makes things fun and helps me to focus" (Grade 7, School C). These student reflections provide evidence against claims that students only want to "have fun" or that they do not value learning. Instead, these students' voices indicate that excellent teachers are both fun and engaging *and* that they teach in ways that supports students' learning: "Just have a bit of fun in the classroom but still on task and that type of stuff" (Grade 10, School A).

Although students spoke of excellent teachers as those with a positive attitude who made learning "fun," this should not be interpreted as a preference for populism over substance. Students also accepted that discipline was important and necessary; their preference was in the way discipline was enacted and the nature of the exchange.

Oh, man. Probably, like - because they care about you, and they want you do good, but then they're, like, good enough to have a joke. Like, some teachers are really strict, like you walk in, you can't talk to anyone, and you've got to be quiet and do your work, otherwise you're in detention (Grade 8, School A).

#### **Classroom Organization**

Almost one in five statements (18.3%) related to teachers' classroom organization skills which encompass behavior management, productivity, and the use of a variety of modalities. Students appreciated the behavior support provided by teachers they believed were "excellent" even if they did not always like

the way that particular teacher did it, distinguishing between teachers who did things "for a good reason" and other teachers who some students believed were just "picking on" them.

Mr. V. He cares for basically the whole school. He gives us reasonable detentions and gives us fitness if we don't do what he says, and he's just a very nice teacher (Grade 8, School A).

While it is quite possible that all teachers believe they have good reason, the fact that these students do weigh reasonableness and acknowledge that the actions of some teacher's actions are reasonable—even though students might find those actions annoying—gives credence to their views about the unreasonableness of some other teacher's actions. It is not, in other words, simply the case that these students reject discipline, no matter how it is dispensed or who dispenses it. Rather, they clearly accept the need for reasonable discipline, but when it is dispensed kindly and with respect.

Some students also pointed to the ability of teachers to keep the lesson moving. While we referred previously to excellent teachers who helped to keep students on task, some comments were more applicable to the Productivity dimension, which is an element within the Classroom Organization domain. It is well-known that young people decry lessons that are "boring" but, as a descriptor, the word boring does not tell us much. One particularly important distinction from students came in the form of pace-lessons that drag or do not have clear purpose are invitations for alternative entertainment in the form of clowning and disruption. Pace, however, is a very tricky element of quality teaching for if teachers move too fast through the content, some students will get left behind. Similarly, if teachers talk too fast and/or do not employ clear sequences in instructional dialog, students cannot process what their teachers are saying to understand what those instructions are, leading to frustration and potential teacher-student conflict. Students prefer lessons with variety, that keep moving and which have a clear purpose.

Teachers that are always moving through the lesson make it fun. Do you know Mrs. W at school? She's a mad teacher. When we clashed sometimes, and I had a bad day, we kept moving. With music or writing or memory with timelines and stuff like that (Grade 9, School D).

#### **Emotional Support**

Of the 90 statements that were coded, almost one quarter (24.7%) related to emotional support: the positive climate that teachers fostered in their classrooms, the sensitivity of teachers to their students, and teachers' regard for student perspectives. Students recounted the actions of excellent teachers who provided breaks and other strategies to support students to self-regulate and then return to their class work when they were ready:

That if I'm having a bad day they'll actually, only a couple of them will try and turn my behavior around. They'll just let me be for like 5, 10 mins and just draw and calm down and all that. And then they'll say you have to do a bit of work now and then you can draw in the next couple of minutes (Grade 9, School C).

An important finding was that many students said that excellent teachers were responsive to all students and checked in

with "everyone" in the class. Students gave examples of teachers who moved around the room and approached students gently to make sure they were "okay." Further, these teachers had established a classroom culture where students felt safe to ask questions and seek clarification when needed:

... so their understanding and their kindness and, yeah. Well, if you get a teacher like that, then you automatically you feel safe, so you're like, "Okay, well I can learn with this teacher. I know that they're going to help me and understand me" (Grade 9, School D).

The excellent teachers that students spoke about provided check-ins and reminders in a way that ensured students felt respected and valued, saying: "Those two teachers, they're actually respectful to students no matter what" (School C, Grade 10).

#### Instructional Support

When the 90 statements were coded across the four categories, the majority (40.9%) of statements related to teacher practices that were coded into instructional support. This is a novel finding given the emphasis on student welfare (or emotional support) in complex schools serving disadvantaged communities and the belief that this type of support is what students want from their teachers. It is also an important finding because students' responses to the question of what makes an excellent teacher and what those teachers do overwhelmingly spoke to the support they provide to help students understand and learn.

She helps us if we're really stuck, she makes sure we know what we're doing (Grade 9, School A).

Mainly because they help me get my work done, they help me proceed and do what I can to be best I can (Grade 8, School A).

One Grade 9 student, also from School A, who had spoken previously about teachers with whom he had a poor relationship, spoke about his "excellent" teacher as preventing student-teacher conflict through explicit teaching.

It's like he always like stops fights before they happen. He like - so like say that a student doesn't get it he stops and like he explains it like multiple times until like the person actually gets it and does demonstrations, get the students up there. Like the students that don't get it and gets them to do it, so they get it.

During the interviews, students stated that clear instructions were important for comprehension and that the way teachers give instructions and explanations impact whether they understand what the teacher has said. For example, a Grade 8 student from School C suggested teachers could: "If they didn't understand the explanation, explain it again in a different way, maybe." Another student from the same school described the importance of teachers not rushing during explanations, saying that "excellent" teachers: "spend a lot of time on explaining it to make us understand it" (Grade 7, School C). When students discussed teaching practices, as opposed to relational style, they often made specific reference to teachers' checking their understanding of content and instructions, saying: "The way they teach, how much help they give to the one certain student and stuff. Because we get more help, if you don't understand she'll help you, or they'll help you" (Grade 9, School D). Students also suggested that excellent teachers provided targeted support, saying: "they help other students when they need to" (Grade 9, School D).

Regularly in the interviews, students spoke to the fact that "excellent teachers" reiterated key points and used a range of teaching strategies to help convey information and concepts. For example, a student from Grade 8 in School C said: "If you're having trouble she'll come and describe - do it in a different way until you get how to do it." Students said that "excellent teachers" were good at giving clear explanations, in that they: "...explain the tough things more. Giving examples, like if the student doesn't understand, just giving examples" (Grade 9, School D). One student also spoke to the power of teachers using familiar concepts to explain new information, saying: "The way he explains it. Say he makes a story, because he knows a story about everything, pretty much" (Grade 9, School D). Other students said that excellent teachers check in with students to confirm their comprehension of the task and to provide individualized instruction, if required:

They explain everything, they take time out of the lesson to ensure you're okay and see if you're on track and always supportive and even if you're not normal, they support you no matter what (Grade 9, School D).

## DISTILLING THE ELEMENTS OF INCLUSIVE QUALITY TEACHING

The students that were interviewed in this project report that excellent teachers bring a combination of personal traits, classroom organizational skills, and both emotional and instructional supports. When these practices were not in existence, students often drew on their peers for support. For example, one student from School A reported that whenever she did not understand what the teacher had said, she would ask her friends because: "they actually can explain like what we're doing because like I've known them for like 3 or 4 years" (Grade 7, School A). However, she said that she often got in trouble for asking other students what they should be doing or to explain what the teacher had just said. When asked if she could do anything differently to avoid getting in trouble, this student surmised that because she still needed that support she would: "Maybe do it more secretly. Like ask my friends for help more secretly" (Grade 7, School A). Note that she did not say she could ask the teacher to clarify or re-explain. The key point here is that lack of clarity in teaching creates other problems, such as students feeling confused and talking in class, which could otherwise be addressed proactively by increasing the accessibility of teaching, as well as providing opportunities for peer-to-peer support.

Importantly, students' responses to the question "What makes an excellent teacher?" corresponded with their responses to other questions in the interview, especially "Are there some teachers that you get along better with than others?" While there were some responses that it depended on the subject discipline, in that students tend to do better and feel more capable in subjects they know and like, most students spoke to the accessibility of teaching irrespective of subject. Providing further support for the value of the accessible teaching practices described during the interviews are comments from students who, when asked earlier in the interview about teachers they did *not* get along with, described teachers who would ignore or dismiss their requests for clarification. Although a common issue, this was clearly encapsulated in the comments of one student in Grade 9, who said "Sometimes if I need help, he'll just brush it off. He'll just be like, "no, I've given you enough information' when he hasn't" (School D). While this teacher may have thought that they did provide enough information, the delivery may not have been accessible to all students, especially those with any form of difficulties affecting language or cognitive processing. No amount of information will be helpful if it is not delivered accessibly.

Students described several teaching practices that align with *inclusive* quality teaching, such as teachers' adopting a pace that kept the lesson moving but which also supported them to engage with the lesson content, while not overwhelming students' information processing capabilities. The most dominant practices described were teachers' use of comprehension checking, repetition and reminders, and clear explanations. Some students specifically noted the importance of teachers giving brief explanations, that were easier for students to comprehend: "She's really good. She understands all the children. They all understand, because she gives brief explanations" (Grade 9, School D). For these students, less really *is* more.

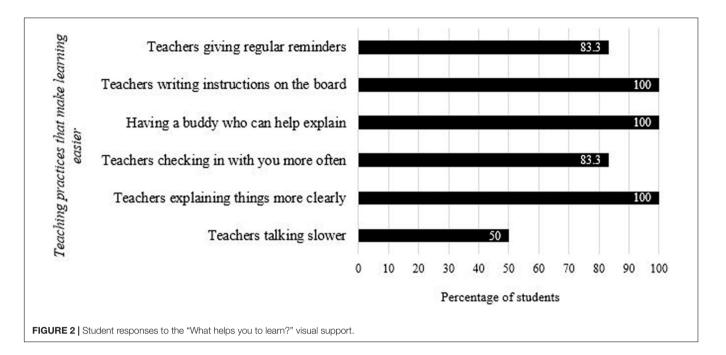
To further probe patterns emerging from our preliminary analyses of the interview data, we created a visual support to help scaffold and test responses about inclusive quality teaching with the 15 students from School D. Six options representing core themes from preliminary analyses of School A and School B interview data were provided in the visual support:

- (i) Teachers talking slower.
- (ii) Teachers explaining things more clearly.
- (iii) Teachers checking in with you more often.
- (iv) Having a buddy who can help explain.
- (v) Teachers writing instructions on the board.
- (vi) Teachers giving regular reminders of what you are meant to be doing.

As shown in **Figure 2**, there was a high rate of agreement from these 15 students for teachers using various means of presenting information (a core component of universal design for learning), having a buddy who can help with interpretation, and clarity of instruction, followed by reiteration, and checking understanding. Teachers talking more slowly did not rate as highly, however, student feedback suggested that pace was less of an issue when other elements were present in teachers' instructional talk, e.g., clarity, logical sequence.

When shown the visual support, one Grade 9 student from School D stated: "If that all happened in every single class then I wouldn't have any issues." Similarly, another said:

Teachers' explaining helps. And when they check in with you and explain what it is. Having a buddy does help because if you're stuck, they can help you and, if they're stuck, you can help them.



And when they're writing instructions on the board you can see how you're meant to do it. And the steps of how to get the answer.

## CONCLUSION

In describing what makes an excellent teacher, students in this study did nominate aspects of teachers' temperament or personality, such as being good-natured, funny and kind. Overall, however, who teachers are *as people* received the least attention from students. Further, while students talked about "care," this was typically invoked in the context of what teachers did *for* students, as opposed to whether they were simply a nice or caring person. Care was also typically described in relation to teacher support for *learning*, and not as emotional or welfare support. This is an important distinction about the type of care young people want from their teachers, especially given these students were attending complex secondary schools, where there was a higher proportion of families from disadvantaged backgrounds than in the average school.

When students' statements about teaching practices were coded into categories reflecting the three elements that most researchers agree comprise quality teaching—classroom organization, emotional, and instructional support—we found evidence for all three, but particularly instructional support. This is a critically important finding as a common impression of students with a history of disruptive school behavior is that they do not value education or learning (Graham et al., 2015). Strong similarities in the responses from these 50 students, who had each been nominated by their School Leadership Team to participate in the study's "Brains Trust," suggest that students with a history of disruptive behavior *do* want to learn but that they can find learning in the everyday classroom very difficult. Favorite among their teachers were those who understood those

difficulties and who helped them to learn. In describing what they believe makes an excellent teacher, students stated that they liked teachers who made learning easier rather than harder, that they were more engaged and less disruptive in those teachers' classes, and that they experienced less conflict with those teachers. Critically, all but one of the 50 students characterized "easier" in terms of accessibility and not in terms of being "let off the hook" academically.

Dominant among the statements coded into instructional support were practices that improve the accessibility of teaching and the comprehensibility of lesson content. Analysis identified a range of key practices from which we developed and piloted a visual resource. While this pilot included only 15 students from School D, we still learned something valuable from them. All agreed that teachers explaining things more clearly and writing instructions on the board helped them to learn. Similarly, most agreed that teachers checking in more often and giving regular reminders to help students stay on task also helped them to learn. Having a buddy who can help explain when they miss information or get stuck was also very popular, however, teachers speaking slower was less so. Students' preference for teachers who keep things interesting by moving through the lesson may explain this discrepancy, but so too does our point that clarity promotes comprehension more so than slower pace because things said slowly but without clarity or coherency can still confuse. Importantly, these findings are supported by strong evidence from the communication and cognitive sciences, which emphasizes the importance of explicit teaching, support for language and information processing, and the reduction of extraneous cognitive load (Gathercole et al., 2006; Sweller, 2016).

The practices that the 50 students in our "Brain's Trust" identified are not "special" and this is perhaps why their presence appears assumed by those seeking to assess and promote quality teaching. Or perhaps it is the case that students

without disabilities can progress and succeed despite the absence of these teaching practices, and hence these practices are not emphasized in quality teaching measures, in the way they should be? The question for school leaders and researchers interested in the quality of teaching is not whether to abandon existing quality teaching frameworks—like the FFT, CLASS, ICALT, ASOT or QTF—for these frameworks capture many more practices than those we describe here. The issue is that there is insufficient emphasis on these practices in those measures and in conceptions of quality teaching more generally. This is an outcome of general education's myopia when it comes to students with disability, which leads to the privileging of a standard of teaching that might "work" for the middle of the distribution, but which fails a very large minority of learners at both ends of the academic scale.

To be frank, students with disability are not unicorns. They do not have "special needs," as in the need for unique or arcane practices that no other students need or will not benefit from. Indeed, our most recent project, which is advancing the research outlined here through a large-scale waitlist study with 24 English teachers and several hundred Grade 10 students both with and without disability, is finding that students without disability identify the same instructional barriers as students with disability: the difference between the two groups is in the resources students can access to overcome those barriers. However, if teachers engage in high-quality inclusive practiceall the time, irrespective of which students are in their class and whether they have an identified disability or not-the barriers that block access to learning for students with high-incidence disabilities (such as ADHD and DLD, who together account for around four students in every classroom; Graham and Tancredi, 2020) are either eliminated or substantially reduced, clearing the way for all, except, of course, students requiring more significant adjustments, such as modified curriculum.

This takes us back to our earlier point about the *degree* of quality necessary to meet the learning needs of the wide range of students present in everyday classrooms. Classroom teachers regularly express concerns that they do not know how to teach students with disability, yet the feedback from these 50 students suggests that many teachers actually *do* know, because the practices these students say they need are simple and not unique. Delivery, however, is patchy and it is this that we need

### REFERENCES

- Blazar, D., and Archer, C. (2020). Teaching to support students with diverse academic needs. *Educ. Res.* 49, 297–311. doi: 10.3102/0013189X209 31226
- Brownell, M. T., Jones, N. D., Sohn, H., and Stark, K. (2020). Improving teaching quality for students with disabilities: establishing a warrant for teacher education practice. *Teach. Educ. Spec. Educ.* 43, 28–44.
- Byrnes, L. J., and Rickards, F. W. (2011). Listening to the voices of students with disabilities: Can such voices inform practice? *Australas. J. Spec. Educ.* 35, 25–34. doi: 10.1375/ajse.35.1.25
- Cefai, C., and Cooper, P. (2010). Students without voices: the unheard accounts of secondary school students with social, emotional and behaviour difficulties. *Eur. J. Spec. Needs Educ.* 25, 183–198. doi: 10.1080/08856251003658702
- Connor, D. J., and Cavendish, W. (2020). 'Sit in my seat': perspectives of students with learning disabilities about teacher effectiveness in high school inclusive

to urgently address. To borrow from medical research, inclusive quality teaching may be more an issue of dosage and the question for system and school leaders is whether all teachers engage in inclusive practices with the consistency, frequency, and intensity that these students need them to. Our 50 participants suggest that not all teachers do, and that disruptive behavior, studentteacher conflict, and exclusionary discipline incidents are closely related to how well supported these students feel in their very real efforts to learn.

## DATA AVAILABILITY STATEMENT

The datasets presented in this article are not available and the funding body retains full rights. Requests to access the datasets should be directed to LG, linda.graham@qut.edu.au.

## **ETHICS STATEMENT**

The studies involving human participants were reviewed and approved by Queensland University of Technology (QUT) Human Research Ethics Committee, and approval to conduct research in Queensland state schools was provided by the Queensland Department of Education. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

### **AUTHOR CONTRIBUTIONS**

LG and JG-S conceptualized the project. LG and HT collected, cleaned, and coded the data, and conducted all analyses. All authors wrote the manuscript and approved the submitted version.

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classrooms. Int. J. Incl. Educ. 24, 288–309. doi: 10.1080/13603116.2018.145 9888

- Danielson, C. (2007). Enhancing Professional Practice: A Framework for Teaching, 2nd Edn. Alexandria, VA: Association for Supervision and Curriculum Development.
- Dimitrellou, E., and Male, D. (2019). Understanding what makes a positive school experience for pupils with SEND: Can their voices inform inclusive practice? *J. Res. Spec. Educ. Needs* 20, 87–96. doi: 10.1111/1471-3802.12457
- Fauth, B., Atlay, C., Dumont, H., and Decristan, J. (2021). Does what you get depend on who you are with? Effects of student composition on teaching quality. *Learn. Instr.* 71:101355. doi: 10.1016/j.learninstruc.2020. 101355
- Fauth, B., Decristan, J., Decker, A. T., Büttner, G., Hardy, I., Klieme, E., et al. (2019). The effects of teacher competence on student outcomes in elementary science education: the mediating role of teaching quality. *Teach. Teach. Educ.* 86:102882.

- Finneran, R., Mayes, E., and Black, R. (2021). Pride and privilege: the affective dissonance of student voice. *Pedagogy Cult. Soc.* 1–16. doi: 10.1080/14681366. 2021.1876158 [Epub ahead of print].
- Formosa, L., and Dixon, R. M. (2004). "The NSW DET's Quality Teaching Framework and the realities of a special education classroom," in *AARE International Research Conference*, ed. P. Jeffery (Coldstream Victoria: AARE Inc).
- Gathercole, S. E., Lamont, E. M. I. L. Y., and Alloway, T. P. (2006). "Working memory in the classroom," in *Working Memory and Education*, ed. S. J. Pickering (Cambridge, MA: Academic Press), 219–240.
- Graham, L. J. (2020). "Chapter 1-Inclusive education in the 21st Century," in Inclusive Education for the 21st Century, ed. L. Graham (Abingdon: Routledge).
- Graham, L. J., Gillett-Swan, J., Killingly, C., and Van Bergen, P. (2022). Does it matter if students (dis) like school? Associations between school liking, teacher and school connectedness, and exclusionary discipline. *Front. Psychol.* 13:825036. doi: 10.3389/fpsyg.2022.825036
- Graham, L. J., and Tancredi, H. (2020). In search of a middle ground: the dangers and affordances of diagnosis in relation to attention deficit hyperactivity disorder and developmental language disorder. *Emot. Behav. Diffic.* 24, 287– 300. doi: 10.1080/13632752.2019.1609248
- Graham, L. J., Van Bergen, P., and Sweller, N. (2015). To educate you to be smart': disaffected students and the purpose of school in the (not so clever) 'lucky country. J. Educ. Policy 30, 237–257. doi: 10.1080/02680939.2014.953596
- Graham, L. J., White, S. L., Cologon, K., and Pianta, R. C. (2020). Do teachers' years of experience make a difference in the quality of teaching? *Teach. Teach. Educ.* 96:103190. doi: 10.1016/j.tate.2020.103190
- Helland, W. A., Posserud, M. B., and Lundervold, A. J. (2020). Emotional and behavioural function in children with language problems-a longitudinal, population-based study. *Eur. J. Spec. Needs Educ.* 37, 177–190. doi: 10.1080/ 08856257.2020.1857930
- Hirsh, Å, and Segolsson, M. (2021). "Had there been a Monica in each subject, I would have liked going to school every day": a study of students' perceptions of what characterizes excellent teachers and their teaching actions. *Educ. Inq.* 12, 35–53. doi: 10.1080/20004508.2020.1740423
- Katz, J. (2012). Teaching to Diversity: The Three-Block Model of Universal Design for Learning. Winnipeg: Portage & Main press.
- Katz, J., and Sokal, L. (2016). Universal design for learning as a bridge to inclusion: a qualitative report of student voices. *Int. J. Whole Sch.* 12, 36–63.
- Learning Mathematics for Teaching Project (2011). Measuring the mathematical quality of instruction. J. Math. Teach. Educ. 14, 25–47.
- Lingard, B. (2007). Pedagogies of indifference. Int. J. Incl. Educ. 11, 245–266. doi: 10.1080/13603110701237498
- Lingard, B., Hayes, D., and Mills, M. (2003). Teachers and productive pedagogies: contextualising, conceptualising, utilising. *Pedagogy Cult. Soc.* 11, 399–424. doi: 10.1080/14681360300200181
- Malmqvist, J., and Nilholm, C. (2016). The antithesis of inclusion? The emergence and functioning of ADHD special education classes in the Swedish school system. *Emot. Behav. Diffic.* 21, 287–300. doi: 10.1080/13632752.2016.1165978
- Marzano, R. J. (2007). The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction. Alexandria, VA: ASCD.
- McGhie-Richmond, D., Underwood, K., and Jordan, A. (2007). Developing effective instructional strategies for teaching in inclusive classrooms. *Except. Educ. Can.* 17, 27–52.
- Morris-Mathews, H., Stark, K. R., Jones, N. D., Brownell, M. T., and Bell, C. A. (2021). Danielson's framework for teaching: convergence and divergence with

conceptions of effectiveness in special education. J. Learn. Disabil. 54, 66-78. doi: 10.1177/0022219420941804

- NSW Department of Education. (2003). Quality Teaching in New South Wales Public Schools: A Discussion Paper. Sydney: NSW Department of Education.
- O'Connor, M., Hodkinson, A., Burton, D., and Torstensson, G. (2011). Pupil voice: listening to and hearing the educational experiences of young people with behavioural, emotional and social difficulties (BESD). *Emot. Behav. Diffic.* 16, 289–302. doi: 10.1080/13632752.2011.595095
- Pianta, R. C., La Paro, K. M., and Hamre, B. K. (2008). Classroom Assessment Scoring System<sup>TM</sup>: Manual K-3. Baltimore, MD: Paul H Brookes Publishing.
- Ripley, K., and Yuill, N. (2005). Patterns of language impairment and behaviour in boys excluded from school. Br. J. Educ. Psychol. 75, 37–50. doi: 10.1348/ 000709905X27696
- Sellman, E. (2009). Lessons learned: student voice at a school for pupils experiencing social, emotional and behavioural difficulties. *Emot. Behav. Diffic.* 14, 33–48. doi: 10.1080/13632750802655687
- Simon, S., Heck, D., Christie, M., and Farragher, Y. (2021). Leading pedagogical reform: Australian principals tell their stories. *Int. J. Leadersh. Educ.* 24, 266– 289. doi: 10.1080/13603124.2019.1613566
- Singh, P., Allen, J., and Rowan, L. (2019). Quality teaching: standards, professionalism, practices. Asia Pac. J. Teach. Educ. 47, 1–4.
- Stephenson, J., Bo, T., Chavez, D., Fayle, L., and Gavel, J. (2007). Authentic pedagogy and students with severe disabilities. *Asia Pac. J. Teach. Educ.* 35, 55–68. doi: 10.1080/13598660601111273
- Sweller, J. (2005). "Implications of cognitive load theory for multimedia learning," *The Cambridge Handbook of Multimedia Learning*, ed. R. E. Mayer (Cambridge: Cambridge University Press).
- Sweller, J. (2016). Working memory, long-term memory, and instructional design. J. Appl. Res. Mem. Cogn. 5, 360–367. doi: 10.1016/j.jarmac.2015.12.002
- United Nations Committee on the Rights of Persons with Disabilities (2016). *Article 24: Right to Inclusive Education, CRPD/C/GC/4.* New York, NY: United Nations.
- van der Lans, R. M., van de Grift, W. J., and van Veen, K. (2019). Same, similar, or something completely different? Calibrating student surveys and classroom observations of teaching quality onto a common metric. *Educ. Meas.* 38, 55–64.

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